LEATH & ROSS,

WHOLESALE AND EXPORT

HOMŒOPATHIC CHEMISTS,

9 VERE STREET, W.,

AND AT 5 ST. PAUL'S CHURCHYARD, E.C., LONDON.

Wholesale and Export Department—9 VERE STREET, W.

OUR £10 10s. AGENTS' SHOW CASE.

Contents realise £17 17s. 8d.

DIMENSIONS.—Length, 18 in.; Breadth, 13 in.; Height, 13 in.

DESCRIPTION.—A Handsome Bent Glass Case, with three drawers, the contents of top drawer visible, the Pilules and Tinctures arranged in the other two in alphabetical order.

WHOLESALE PRICE LIST OF MEDICINES PUT UP READY FOR SALE.

PILULES—	Sixpenny Bottles	— 2/9 per dozen.	TINCTURES—	Sixpenny Bottles	— 2/9 per dozen.
	Ninepenny ,,	— 4/- ,,		Shilling ,,	— 5/- ,,
	Shilling ,,	— 5/- ,,			

Subject to Cash Discount.

PROPRIETARY ARTICLES.

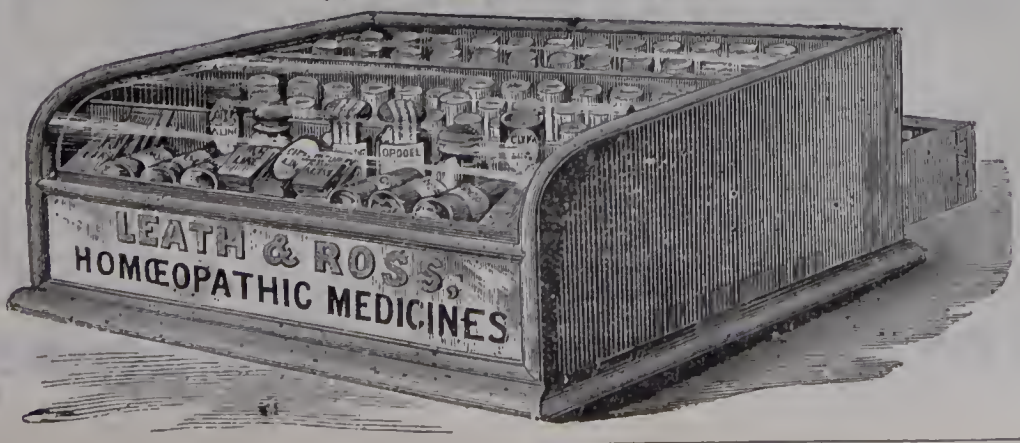
Neuraline — — —	1/1½	Berberine ... — —	1/1½	Linimentum Auricularis ...	1/1½
Glykaline	1/1½	Chilblain Liniment ... —	1/1½	Bryonia Liniment ... —	1/1½
Phospho-muriate of Quinine	1/1½	Odontagic Essence ... —	1/1½	Corn Eradicator — —	1/1½

All the above Proprietary Articles, 9/6 per dozen. Subject to Cash discount.

OUR £6 6s. AGENTS' SHOW CASE.

Contents realise £10 18s. 3d.

DIMENSIONS.—Length, 20 in.; Breadth, 15½; Height, 9½ in.



DESCRIPTION.—A Handsome Bent Glass Case, with two drawers, the contents of top drawer visible, the Pilules and Tinctures arranged in alphabetical order.

J. RAPHAEL & CO.

CHEAPEST HOUSE IN THE TRADE FOR

SPECTACLES, FOLDERS, FIELD, OPERA, & MARINE GLASSES,

Telegraphic Address—
"EL PRECIO."

TRADE ◇ MARK.

Repairs and Post Orders Despatched Same Day.

13 OXFORD STREET, LONDON. W.

E. FOUGERA & CO.,

No. 30 NORTH WILLIAM STREET,
NEW YORK, U.S.A.,
Importers of and Agents for the Principal
FOREIGN MEDICINAL PREPARATIONS
AND SPECIALTIES.
AGENCIES AND CORRESPONDENCE SOLICITED.

FOR CLEANING PLATE

BRADLEY & BOURDAS'S

ALBATUM or WHITE ROUGE,

For Cleaning Gold, Silver, and Plated Goods.

Since its introduction as a substitute for the ordinary Rouge, a quarter of a century ago, the sale has amazingly increased both at home and abroad. A trial is only needed to prove its superiority over other plate powders in use. Sold in Boxes at 1s. and 2s.; Tins, 6s. 6 Pont Street, Belgrave Square, and 48 Belgrave Road, London, S.W.

THE CITY SCHOOL OF CHEMISTRY & PHARMACY, LIMITED,

27 CHANCERY LANE, LONDON, W.C.

The Evening Classes are held on Tuesday, Wednesday, Thursday, and Friday, 6 till 10
Fee from Half-a-guinea per month.
Full particulars of Mr. MAURICE WILLIAMS, Managing Director.

MAJOR, MINOR, AND PRELIMINARY EXAMINATIONS OF PHARMACEUTICAL SOCIETY.

EADE'S

CELEBRATED

GOUT

AND RHEUMATIC

PILLS.

THE SAFEST and MOST EFFECTUAL CURE for

Gout,
Rheumatism,
Rheumatic Gout,
Lumbago,
Pains in the Head
Face, and Limbs, &c.

They require neither confinement nor alteration of diet, and in no case can their effect be injurious.

Prepared only by GEORGE EADE, 72 Goswell Road, London, and sold by all Chemists, in bottles, 1s. 1½d.; three in one, 2s. 9d.

REGISTERED TRADE MARK.

MRS. E. FILCE'S OINTMENT.

None genuine without bearing the registered trade mark.

SOLD IN 7½d., 1s. 1½d. and 2s. 9d. POTS.

Sole Proprietress—Mrs. E. FILCE.

(To be had of Chemists & Druggists throughout the United Kingdom.)

Local Address—1 Theobald Road, Croydon.

CARBOLIC POWDER, £6 TON.

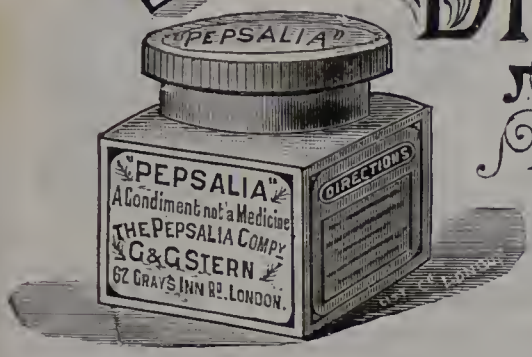
1-ton lots and upwards.

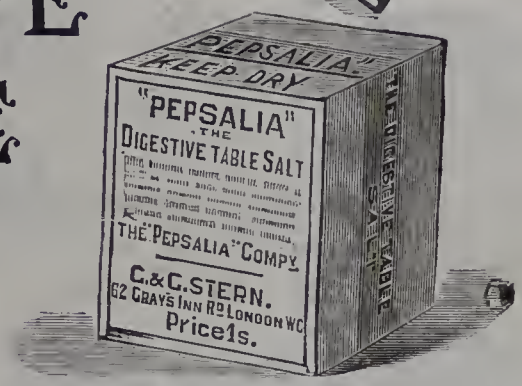
CARBOLIC PINK POWDER, 5/-, 7/6, and 10/- per cwt., in bags or casks.
WHITE CARBOLIC POWDER, 10 %, 15 %, and 20 %, equally cheap.
HANDSOME LARGE DECORATED BLACK AND GOLD TIN BOXES,
Holding 1½ lb. (usual 1/- size), 4/6 doz. Ditto, LARGE SIZE (usual 1/6 size), holding about double quantity, 6/- doz.
PALE CARBOLIC ACID, 99 per cent. (No. 5), and CHLORIDE OF LIME below market prices.
CRUDE CARBOLIC ACID (Brown), 1/-, and 1/6 Gallon; also in patent stoppered bottles, labelled.
SANITARY FLUID or CREOSOL (to be used with 100 parts of water, making a *milky fluid*), half usual prices.
All goods delivered free in London or suburbs, or to rail or docks. *THE CHEAPEST HOUSE IN THE TRADE.* [2]

HAMILTON & CO., HIGH STREET, WANDSWORTH, LONDON, S.W.

REGISTERED "PEPSALIA" TRADE MARK

THE DIGESTIVE TABLE SALT.





Is used at meals in the same quantities as, and in lieu of, ordinary table salt

The Lancet, May 20, 1890, says:—"In Pepsalia we have a convenient means of aiding digestion."

The British Medical Journal, June 28, 1890, says:—"Pepsalia possesses a high degree of digestive power. We have satisfied ourselves that it affords a strong aid to digestion. **The claims put forward for PEPSALIA are justifiable.**"

The Medical Press and Circular, April 16, 1890, says:—"Pepsalia gives evidence of great digestive activity."

Dr. Hehner, the eminent Analyst, says:—"Pepsalia, when used as an ordinary table salt, exercises powerful solvent action upon nitrogenous materials."

G. & G. STERN have received numerous Testimonials from Medical Men with reference to Pepsalia.

M.D., &c., Cavendish Square, writes, July, 1890:—"During the short time I have been trying your **PEPSALIA** upon myself I have acquired the greatest benefit from it.

"An indigestion which has been slowly growing, resulting in flatulence, discomfort, and sleepiness after meals, general lassitude and depression, has with all these disagreeable symptoms vanished as by a charm since I commenced merely substituting **PEPSALIA** for ordinary table salt with my dinner."

Surgeon Major ——, M.R.C.S., &c., writes:—"**PEPSALIA** promotes the digestive process of food. It cannot be too highly recommended."

M.D., M.R.C.P., London, writes:—"I have used **PEPSALIA**, and am much pleased with it. It acts well as a digestive, and it gives me pleasure to recommend it to my patients."

F.R.C.S., London, writes:—"I consider **PEPSALIA** a good digestive, having taken it myself for dyspeptic symptoms with great benefit."

Price 1s. and 2s. per Bottle. To Chemists, at 10s. and 20s. per Dozen, less 5 per cent. discount.

G. & G. STERN,

62 GRAY'S INN ROAD, LONDON, W.C.

Will send Samples for distribution among Medical Men, and Literature, free on application.

FORD, SHAPLAND & CO.

MEDICAL LABEL & GENERAL PRINTERS, LITHOGRAPHERS, ENGRAVERS, &c., 6 GREAT TURNSTILE, LONDON, W.C.

PRIZE AND OTHER NEW DESIGNS FOR COUNTER BILLS

NOW READY. Printed in Colours, on White and Coloured Paper, for Chemists' Advertising. A Great Novelty.

CABINET PAPER

FOR THE WATER CLOSET. In Registered Shape Boxes and in Packets. Samples and Prices on application.

ORDINARY COUNTER BILLS,

On GOOD WHITE PAPER, at LOWEST PRICES ever offered.

10,000 CROWN OCTAVO BILLS (7½ in. × 5 in.) **12/0**

10,000 DEMY OCTAVO BILLS (9 in. × 5½ in.) **17/6**

ALL OTHER SIZES AT EQUALLY LOW RATES. SAMPLES AND PRICES ON APPLICATION.

Demy Paper and Wrapping Paper for Chemists, Twine, Sealing Wax, &c. Agents for Registration of Trade Marks. Designs Furnished if required.

Look!

We thank our Customers for the patronage so kindly bestowed upon us, and beg to remind them they will find us ever ready to place the resources of our office at their disposal.

BOWERS BROTHERS, Printers
89, Blackfriars Road, and
25, Canterbury Road, Brixton, S.E.

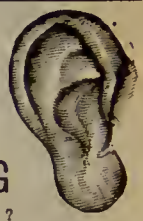
Important Features.

NEWEST SHADES IN INKS.
NOVELTIES IN PAPER.
LONG EXPERIENCE.
ORIGINAL IDEAS.
LATEST DESIGNS.
FAST PRESSES.
CHEAPNESS.

Listen!

FINE SATISFACTORY. APPROPRIATE. ATTRACTIVE. ARTISTIC. QUAINT. PLAIN. ODD. PRINTING

WHAT APPEALS MORE PERSUASIVELY?



Write for Estimates & Specimens. *Bowers Brothers, Blackfriars London, S.E.*

PRIZE MEDAL, PARIS EXHIBITION, 1889.

ZUCCATO'S PATENT

TRYPOGRAPH

NEW MODEL, 1888.

PRINT YOUR OWN NOTICES, CIRCULARS, PRICE LISTS, &c.

SIMPLE, CLEANLY, RELIABLE, CHEAP.

Price from 25s.

PAYS FOR ITSELF AFTER A FEW TIMES USING.

5,000 Copies can be produced from one writing. *Is invaluable to Chemists and Druggists for the rapid production of Price Lists, Circulars, &c., &c.* Full particulars, with specimens of work. Testimonials, &c., on application to the Manufacturers and Patentees—

ZUCCATO & WOLFF, 12 CHARTERHOUSE STREET, LONDON, E.C.

PRIZE MEDAL, International Health Exhibition, 1884.

THE NEW PERMANENT

ENGRAVED WINDOW TABLETS

AWARD OF MERIT, International Sanitary Exhibition 1881.

IN RUBY, BLUE, AMBER, AND OPAL GLASS.

Send particulars of size, subject matter, and colour, when price for one Tablet and upwards will be sent.

For Proprietary Articles, 100 8×6 Ruby Tablets, £3 15s. 0d.

J. R. CORSAN, THE LONDON SAND-BLAST WORKS, 80 GRAY'S INN ROAD, W.C.

TO PREVENT FRAUD, DEMAND BUSINESS CARD FROM TRAVELLERS.

JAMES TOWNSEND
MEDICAL LABEL PRINTER
EXETER

SEND FOR SAMPLES.

High-class Artistic

HANDBILLS

SEND FOR SAMPLES OF LABELS.

H. Silverlock
MEDICAL LABEL & GENERAL PRINTER ENGRAVER Lithographer & Manufacturing Stationer
92 Blackfriars Road
LONDON
Revised Catalogue of VARIOUS LABELS & ESTIMATES for every description of Printing required by the MEDICAL PROFESSION CHEMISTS PERFUMERS AERATED WATER MANUFACTURERS &c. forwarded POST FREE on application

LONDON HOMŒOPATHIC HOSPITAL AND MEDICAL SCHOOL, GREAT ORMOND STREET, BLOOMSBURY, W.C.

President—THE LORD EBURY. *Chairman*—MAJOR WM. VAUGHAN MORGAN.

Contains 90 Beds, and being entirely supported by Voluntary Contributions, Donations and Annual Subscriptions are earnestly solicited. The Hospital is always open to the inspection of visitors, and Clinical Instruction is given in the Wards and Out-patient Department to Medical Students and Practitioners. It possesses a valuable Library of Homœopathic Publications, which Medical Men are invited to study. They are also invited to visit the Dispensary. The In-patients number over 700 annually; the Out-patients nearly 3,000 annually. The number of Patients treated since the inauguration in 1849 exceeds 215,000. It has a staff of 42 Nurses for Ward Nursing and Nursing Invalids at their residences.

G. A. CROSS, *Secretary-Superintendent.*

Now Ready, Second Edition, Crown 8vo., price 5s.

A PRACTICAL MANUAL OF VENEREAL AND GENERATIVE DISEASES:

Including SPERMATORRHŒA, PROSTATORRHŒA, IMPOTENCE, and STERILITY in Both Sexes.

By M. K. HARGREAVES, M.D.

Assistant Physician to St. John's Hospital for Diseases of the Skin.

LONDON: R. KIMPTON, 162 WARDOUR STREET, LONDON, W.

SPONGE IMPORTERS.

M. PETERSON & CO.

(ESTABLISHED 1870),

75 ST. ANNE STREET, LIVERPOOL.

FOR HOME, FOREIGN, & COLONIAL MARKETS.

A Copy of this Supplement is inserted in every number issued of "The Chemist & Druggist."

The Chemist and Druggist SUPPLEMENT

Businesses Wanted.
Businesses for Disposal.
Premises to Let.
Auction Sales.

SATURDAY, AUGUST 23, 1890.

Partnerships.
Situations Vacant.
Situations Wanted.
Miscellaneous.

This Supplement will be given free to any Chemist and Druggist or Assistant who will call for it at 42 Cannon Street on Friday afternoon, or will be posted on Fridays to any one who sends an addressed postal wrapper.

OFFICES: 42 CANNON ST., LONDON, E.C.

CHEMISTS' TRANSFERS.

MESSRS. ORRIDGE & CO., 32 LUDGATE HILL, E.C.

CHEMISTS' TRANSFER AGENTS,

May be consulted at their Offices on matters of SALE, PURCHASE, and VALUATION.

The business conducted by Messrs. ORRIDGE & Co. has been known as a Transfer Agency since the year 1846, and is well known to all the leading firms in the Trade. VENDORS have the advantage of obtaining an opinion on value derived from extensive experience, and are in most cases enabled to avoid an infinity of trouble by making a selection from a list of applicants for purchase, with the view of submitting confidential particulars to those alone who are most likely to possess business qualifications and adequate means for investment. PURCHASERS who desire early information regarding eligible opportunities for entering business will greatly facilitate their object by describing clearly the class of connection they wish to obtain.

1.—**LONDON (Suburb), W.**—Good-class Retail and Dispensing Business; returns at present at the rate of £850 yearly, with *good profits*; large well-fitted shop and good stock; large house attached; small garden and lawn; about £600 required.

2.—**LONDON (City).**—Lock-up shop, Business of good class, Dispensing and Prescribing; returns last year £565, increasing, with *good profits*; well-fitted shop and good stock; full particulars on application.

3.—**LONDON, N.W.**—Retail and Prescribing Business: returns over £500 yearly; single-fronted, well-fitted shop and good stock, with large house; immediate possession; price £400.

4.—**KENT.**—Unopposed country Business of good class; returns over £550 yearly; large, well-fitted corner shop and good stock; good 11-roomed house, small garden, &c.; about £450 required.

5.—**NOTTINGHAMSHIRE.**—Good town; Retail and Dispensing Business of good class; returns nearly £1,100; well-fitted shop and good stock; terms, £50, goodwill, and valuation only required.

6.—**CATHEDRAL TOWN.**—An Old-established Business, excellent position, with large handsome shop; returns about £2,500 yearly; good house held on lease; applicants prepared to invest about £2,500 will oblige by giving London reference, upon which the particulars will be furnished in confidence.

7.—**SOMERSETSHIRE.**—Fashionable locality; an old-established first-class Business, situate in a prominent position; returns about £1,200 yearly: *very profitable* (about £500); some good specialities are attached to the business. Full particulars on application.

8.—**EASTERN COUNTIES.**—Unopposed country Business of good-class; returns between £550 and £600 yearly, *with good profits*; small house, attached at very low rental; vendor having other engagements is anxious for an immediate sale; will accept £300.

9.—**SUSSEX.**—Fashionable locality; first-class Pharmacy for immediate disposal; returns £1,350 yearly; *profits above the average*; large stock; premises held on lease; about £1,100 required.

10.—**OXFORDSHIRE.**—Mixed Business with Post Office attached; returns about £2,000; business capable of being much increased; well-fitted shop and good stock; any reasonable offer will be considered.

11.—**HOME COUNTY.**—Within easy distance of town, Dispensing and Retail Business; returns about £550 yearly; large corner shop, good stock, comfortable house; price £450.

12.—**OXFORDSHIRE.**—Good-class increasing Business; returns at present about £400 yearly; well-fitted corner shop and good stock; good house attached; £375 required.

13.—**HANTS.**—Light Retail and Family Business; returns average nearly £550 yearly; well-fitted shop and good stock; large 10-roomed house, at low rental; vendor, having other engagements, will accept £200 from an immediate purchaser.

14.—**KENT.**—Situate in good-sized town; Retail, Dispensing, and Prescribing Business, with a good proportion of proprietary articles, rendering the business both safe and profitable; returns over £800 yearly; good house; price about £750.

Particulars of any of the above will be furnished on application.

N.B.—NO CHARGE TO PURCHASERS.

Other Businesses, Town and Country; particulars free on application. Personal applicants receive Messrs. O. & Co.'s direct attention and advice, where required, free.

TERMS FOR VALUATION ON APPLICATION. APPOINTMENTS BY POST OR WIRE HAVE IMMEDIATE ATTENTION.

Messrs. ORRIDGE & Co. invite communications from COLONIAL and FOREIGN firms where business of a confidential nature requires the especial attention of a London agent.

SPECIAL NOTICE.—TO PRINCIPALS AND ASSISTANTS.

MESSRS. ORRIDGE & Co. Register Vacancies for Situations FREE OF CHARGE.

ORRIDGE & CO., 32 Ludgate Hill, LONDON, E.C.

PARTNERSHIP.

PARTNERSHIP.—Wanted, an active Partner to take charge of one of two businesses in a growing town in the North of England; takings at both £16 weekly, increasing; capital required £300 for equal share in both concerns (or open to sell outright); fullest investigation invited. "Minor," care of Messrs. Woolley, Manchester.

APPRENTICESHIP.

APPRENTICE wanted; three years' engagement; will be thoroughly taught the business; time for and help given in his studies; good home; moderate premium. Apply, A. C., care of Messrs. Horners & Sons, Wholesale Druggists, Mitre Square, Aldgate, E.C.

FOR SALE.

CHEMIST'S Fittings.—Must be sold, shop being let for other business; mahogany and other drawers and fixtures, counters, glass-stoppered bottles, &c., &c. Can be seen on the premises, 70 Lansdowne Road, South Lambeth. Offers to be sent to Messrs. Snell, Son & Greenip, 1 and 2 George Street, Mansion House, E.C.

FOR SALE.—Stoppered shop rounds; 50 dozen new gold-labelled ditto, at per dozen, 8-oz., 7*s.* 6*d.*; 20-oz., 9*s.*; 30-oz., 11*s.*; 40-oz., 13*s.*; 12-foot range mahogany-fronted drawers, cut-glass knobs, and bevelled plate-glass labels, £9; 12-foot range polished pine ditto, £6 12*s.*; desk and case, 55*s.*; 6-ft. dispensing-screen, mirror centre, £5 10*s.*; ditto, new design, £7 10*s.*; 24 best pink jars, 4-lb., gold-labelled, 5*s.* each; 24 3-lb. blue ditto, ditto, 2*s.* each; 6-ft. polished pine wall-case, 8*l.* Illustrated list post free. R. Tomlinson & Sons, Medical Fitters and Valuers, Bond Street, Birmingham.

F. J. BRETT,
VALUER, LEICESTER,

60 St. Stephen's Road.

References to principal London and Provincial Wholesale Houses, also to numerous clients throughout the United Kingdom.

BUSINESSES THOROUGHLY INVESTIGATED FOR BUYERS. 20 YEARS' EXPERIENCE.

BIRMINGHAM.—First-class suburban Retail and Dispensing returns £500, increasing; price £550, value of stock and fixtures.

LONDON.—Good-class Retail; established 3 years; returns over £500 by Junior; only wants personal attention to double; rent £46, lease; price £125.

MIDLANDS.—Unopposed Light Retail; returns £350, fully one-half net profit; good and large garden; rent £18; price £260.

NORTH OF ENGLAND.—Returns £1,725; can be purchased for £910; opportunity seldom occurring.

CHESHIRE.—Returns £1,500; good-class Retail, with Gilbey agency; returns £1,500; net profit about £500; price £1,150.

WESTERN CITY.—First-class Retail and Dispensing; sale consequence of serious illness; net profit £500.

Mr. Brett has buyers of good-class Businesses, returning £1,000 to £2,000, Vendors can at once be supplied with *cash* buyers.

MESSRS. BERDOE & CO.

CHEMISTS' TRANSFER AGENTS & VALUERS,
30 JEWRY STREET, ALDGATE, E.C.

Established 1870.

VENDORS will find our Offices a quick medium for the Sale of genuine Businesses. Strict confidence guaranteed. Several good-class Businesses wanted returning £700 to £1,500. Town or country.

PURCHASERS are invited to apply (stating their requirements) for particulars of businesses, sent free on application.

NO CHARGE TO PURCHASERS.

KENT (Coast).—Retail and Dispensing Business; returning £800; net profit £350, increasing; good house; price £750; trial allowed.

NOTTS.—Market Town.—Retail, Dispensing, and Prescribing; returns £1,100; net profit £350; low rent; price £600, or valuation.

EASTERN COUNTY.—Unopposed Retail and Prescribing Business; returns £600; rent £20; good house and garden; price £250.

DEVON.—Retail, Dispensing, and Prescribing trade; returns £450; net profit £220; rent £18; good house; price £250, bargain.

MIDLAND COUNTY.—Small Town.—Retail and Prescribing; returning £800; net profit £360; good house; garden; price £500.

WILTS.—Retail and Dispensing; returns £1,300; good profits; large house and garden; same hands 10 years; price £1,000.

NOTTS.—Unopposed village trade; returns £350; rent £15; good house; garden stocked with fruit trees; price £200.

CHESHIRE.—Retail, Dispensing, and Prescribing; returns £800; good profits; large house; low rent; price £500, or valuation.

SURREY.—Retail and Prescribing Business; returns £900; same hands 29 years, retiring; net profit £400; price £850.

BUCKS.—Unopposed Retail, Dispensing, and Prescribing; returns £850; rent £30; good house and garden; price £500.

LONDON, N.—Few miles out.—Good-class Retail and Dispensing, making £450 yearly net profit; low rent; price £850.

N.W.—First-class Dispensing Business; returns £680 by assistant; good house and garden; price £650.

W.—Retail and Dispensing Business; returns £550; excellent house handsomely-fitted shop; price £450.

WEST HAM (Essex).—Retail and Prescribing trade; returns £8 weekly; rent £26; good house and garden; price £175.

Terms for Sale and Valuation on application.

Messrs. Berdoe & Co., 30 Jewry St., Aldgate, London, E.C.

BUSINESSES FOR DISPOSAL.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

A SMALL Light Retail to be disposed of considerably under valuation to an immediate purchaser for cash; giving up business sole cause of disposal. H., care of Mr. Cropley, 67 Wells Street, Hackney.

FOR SALE, on easy terms, the Business of a Chemist and Druggist, at present carried on by a widow and manager. Full particulars on application to "Chicago," 53 Arlingford Road, S.W. No agents need apply.

OLD ESTABLISHED Business; age cause of disposal; shop well fitted and stocked; valuable recipes; cash trade; populous locality; terms on personal application. Address to E. F. K., Miss Atkinson, 40A King William Street, London Bridge, E.C.

W. FOR immediate disposal, a Dispensing and Light Retail Business, returning under manager about £7 a week; could be increased by personal attention; well fitted; cash price £275; over half rent let off. W. E., 100 Portnall Road, Queen's Park, Harrow Road.

Mr. G. B. CROCKER,
Trade Valuer, Transfer Agent, & Accountant,
15 WALBROOK, E.C.

HOME COUNTY (Death Vacancy).—Cash Retail and Dispensing; returns £1,000, profits above the average; low rent; small premium for goodwill and valuation.

KENT.—Family and Dispensing trade; returns £700; handsome Pharmacy; rent £60; price £500; good house.

SURREY.—Unopposed Retail and Dispensing; returns £700; rent £50; price £[illegible]00; very valuable agency attached.

GLOUCESTERSHIRE.—Retail and Dispensing; returns £800; low rent; price £700; handsome Pharmacy, best position in the town.

MIDLANDS.—Mixed country Retail and Dispensing in busy town; returns £900; price £600; almost unopposed; rapidly increasing.

LONDON, S.E.—Dispensing trade giving a net profit of £250 a-year; capital position in main road; good home and handsome Pharmacy; price £500.

LONDON, S.—Good-class Family and Dispensing trade; returns £850; price £750; low rent; good house and garden.

Valuations for Probate or Transfer conducted in any part of the United Kingdom. Terms on application.

BUSINESSES FOR DISPOSAL—Continued.

SCARBOROUGH.—For Sale, a small Mixed Business in main thoroughfare; good house, overlooking South Bay; clears rent, &c., by letting; price £100. Full particulars and investigation. Address, Henry Crane, the Drug Stores, Eastborough, Scarborough.

LONDON, S.E.—For immediate disposal, a Light Retail and Prescribing Business, in thickly-populated neighbourhood; returning about £400 under management, but this could be much increased; rent £40; lease 10 years; price £290. Apply, B., care of Messrs. Hill & Son, 101 Southwark Street.

MIDLANDS.—Genuine old-established Drug Business, with Gilbey's Wine Agency attached, returning in all about £1,100 a year; full prices for everything; nice house and shops, situated in good thoroughfare, at low rental. Apply, "Chemicus," care of Thomas Hopkinson & Co., Wholesale Druggists, Nottingham.

COUNTRY Business, with Wine and Spirit Agency, unopposed, returning about £550; no heavy trade; full prices; population of immediate neighbourhood over 5,000; good shop, warehouse, house, and garden; about 5 miles from London; cash price £250. Apply "Cortex," c/o Evans, Lescher & Webb, 60 Bartholomew Close, London.

SOUTHPORT.—A Dispensary and Family Business for disposal; improving neighbourhood; first class thoroughfare; handsomely-fitted shop; large and convenient house (that could be let off for half rent); price about £350 for stock, fixtures, fittings utensils, &c., or offer. Address, Messrs. Scarlett & Sons, Auctioneers and Valuers, Southport.

£300.—Market town in Wiltshire.—Light Retail, Dispensing, and Prescribing Business for immediate sale; returns nearly £500, good profits; convenient house and large garden; well fitted and stocked shop; £300 will be accepted from prompt buyer. Address, "Wilts," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

£475.—Unopposed; 25 miles from London; attractive locality; Light Retail, Dispensing, and Prescribing Business; returning £800, full prices; rent £30; good house; large garden; greenhouse; same hands 25 years; price £475 cash. For particulars address, J. A. D., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

OLD ESTABLISHED Business for sale in one of the principal thoroughfares of Newcastle-on-Tyne; proprietor retiring on account of ill-health; the business includes an old Dental connection, which could be worked up without difficulty. Full particulars on application to John Ismay & Sons, Wholesale Druggists, Newcastle-on-Tyne.

WANTED, purchaser for Retail Branch of Chemist's business; established about 60 years; shop large, well situated, fitted, and stocked; Dispensing, Agricultural, and General business; capital modern and well-built house; populous manufacturing district on one side, healthy and beautiful country on other; capital required, about £900. Principals only apply, 154/19, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

SPLENDID Health Resort.—A Light Retail, Prescribing, and Dispensing, little Pharmacy, well fitted and stocked with best goods, in market place of country town; very profitable; no heavy trade; suitable to one in search of health; first year's drug returns £130, dentistry £51; price £120 to immediate purchaser (which is considerably under valuation); good house and garden (fruit); rent £16; genuine. Apply, T. H. Dodd, Market Place, Wolsingham via Darlington.

TO CHEMISTS.—For sale, owing to long illness (the result of a severe accident) a most promising Business in the West-end of London; spacious shop and large basement (capable of storing many tons of goods), light and dry packing-rooms, and space for laboratory; moderate rent, and no taxes; the Retail and Dispensing is small, owing to time being taken up in the manufacture of valuable Specialities which have a standard trade of over 20 years' duration; an energetic man, who would devote time to general Counter business, must make a large income. *Bond-fide* buyer with £580 at command, can apply (by letter) to "Chemicus," care of Messrs. H. & C. Barrett, Stationers, 8 Duke Street Mansions, Grosvenor Square, W.

£1,700 Returns, for value of stock and fixtures only; no goodwill; leading Chemist in principal street; leaving trade. Wilson, 30 Marine Approach, South Shields.

A GENUINE old-established Business in Norfolk for immediate Disposal; profits good; unopposed; exceptional opportunity; satisfactory reasons for disposal; price £1,000. Full particulars on application to Smith & Sons, Wholesale Druggists, Norwich.

FOR immediate disposal, a Chemist's Business, 40 miles from London; a rare opportunity for a pushing man; Prescribing, Dispensing, and General Retail, with Dentistry; returns about £550. Apply first to Z., care of Mr. Epiphanoff, 86 Leadenhall Street, E.C.

TO Chemists and Druggists.—For immediate disposal, in small thriving town in Norfolk, a capital Business; steadily increasing, and in splendid working order; incoming £1,000. For terms and particulars, apply to Grimwade, Ridley & Co., Wholesale Druggists, Ipswich.

YORKSHIRE.—Old-established Retail and Prescribing, with several Proprietary Articles; profits much above the average; same hands above 20 years; satisfactory reasons for disposal; strictest investigation and every particular to principals only. Apply first to Z., Raimes & Co., York.

AN old-established Dispensing, Retail, and Prescribing Business, in a healthy country town; quite unopposed; same hands many years; good house and garden; large shop, well stocked; rent £30; returns £850; price £500. R. H., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

FOR SALE.—An old-established Country Business; first-class Dispensing, Prescribing, and Retail, with Seeds; no oils or other heavy trade; good prices; increasing returns, at present £800; convenient premises at low rent. Apply "Chemist," care of Mr. Bingham, 106 Cotham Road, Bristol.

FOR immediate disposal, genuine Retail, Dispensing, and Prescribing Chemist's Business, in London, N.; returns about £650, good profits; large house, pleasant neighbourhood; rent £80, on lease, satisfactory reasons for disposal. "Chemicus," Hearon, Squire & Francis, 38 Southwark Street, S.E.

MIDLANDS.—An old-established light Retail and Prescribing Business, pleasantly situated in country town; good house and garden, private entrance; Dentistry combined would largely increase returns; rent and taxes low; satisfactory reasons for disposal. Address, R. W. H., Southall Bros. & Barclay, Birmingham.

£300 down and £200 by instalments, or £450 cash, will purchase a good Business returning over £500 per annum; in present hands 19 years; can be very much increased; good profits; satisfactory reason for leaving. Address (letter only), Mr. Humphrey, 16 Morwell Street, Tottenham Court Road.

£400.—London, W.—Light Retail and Dispensing Business; capital opening for Dentistry; well-fitted shop and good stock; good modern house, with every convenience; rent more than covered by letting; satisfactory reasons for disposal. Apply, B. A., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

GENUINE Business, in small Midland town, for disposal; all Light Retail and Prescribing; good house, and premises, at low rental; returns £360, increasing; owner taking larger business; no agents need apply; every investigation offered; cash price £250. For full particulars, "Nemo," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

£160.—BRADFORD (suburb).—Genuine old-established Light Retail, Dispensing, and Prescribing Business; prominent corner position in most pleasant part of Borough; foreign wines, with certificate for spirits; returns about £250, under junior management; has done £600; satisfactory reasons for disposal; rent £24. H., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

TWO places on the South Coast for sale. None need apply who do not command £550 for either. Would suit Surgeon, Chemist, or Botanic Druggist. The first is a house, garden, and fixtures, used 7 years as a Provident Dispensary. The second, 36 years in hand of present Surgeon as an Eclectic Dispensary; over this is the Hall of Science and Anatomy, from which a fortune may be made by an energetic man; rent £50. Apply, Dr., 28 Queen's Road, Brighton.

BUSINESSES WANTED.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

WANTED, a Small Chemist's Business, in Middlesbro' or district, with easy access by rail. Address, YORKS, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

TO LET.

TO Chemists and Druggists.—An old-established Shop to let; excellent position, junction of four main roads suburban neighbourhood, greatly increasing; such a chance seldom occurs; good house, garden, side entrance; handsome corner shop, plate-glass front, good cellar; low rent; no goodwill. Apply to A., 4/2, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

SITUATIONS OPEN.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

GOOD Counterman, in good Retail and Dispensing business, where several are kept; send photo. "Chemicus," 11 Abbey Churchyard, Bath.

WANTED, immediately, an Improver or Junior (indoors). Apply, stating full particulars, to R. Driffield, Agricultural Chemist, Spilsby, Lincs.

IMMEDIATELY.—Additional help for the season (two months), a smart Junior. Apply, with carte and references, to F. R. Bessant, Westgate-on-Sea.

DISPENSER.—A qualified man wanted; age under 25 preferred; no Sunday duty. State salary, references, &c., the Oxford Drug Company (Limited), Oxford.

AN Assistant, about 22 or 23 years of age, accustomed to a good Retail and Dispensing business. Apply, with references, to R. Morgan, 5 Liverpool Street, City.

WANTED, a smart, unmarried young man, as canvasser (with previous experience) amongst Doctors and Chemists. Apply to Mr. Mason, 46 Jewin Street, E.C.

SHORTLY.—Unmarried Assistant; Minor and Welshman preferred; indoors; liberal salary to suitable man with good testimonials; permanency. D. W. Jones, Aberdare.

WANTED, a Junior Assistant, outdoors, who is able to prescribe and extract teeth (facilities offered). Apply, stating age, salary required, &c., to Stacey, Manchester Street, Oldham.

WAREHOUSEMAN wanted; must be reliable, steady, and industrious, able to make stock, pack, and get out orders; send full particulars, and state salary. Hagon, Chemist, Cardiff.

WANTED, young man for Mixed business; must be able to Prescribe and Extract Teeth, also willing to do any work in connection with Oil and Drysaltery. Address, Barlow, Chemist, Oldham.

WANTED, at once, a thoroughly reliable and competent Dispenser and Bookkeeper; salary £60–£70; rooms and attendance; unmarried. Apply, Irston, Baines & Rigge, Henley-on-Thames.

TEMPORARY Assistant required for from one week to a fortnight at beginning of September; good appearance. Apply, stating references, age, payment required, &c., with photo, Snartt, Chemist, Stamford.

MESSRS. THOS. G. STONHAM & SON, Maidstone, have a vacancy for a qualified Assistant as Dispenser (indoors). Apply by letter, stating age, height, qualification, and experience; send photo, to be returned.

BRANCH Manager; married; qualified; used to Prescribing; abstainer preferred; house found; permanency. State salary required and usual details, with photo (to be returned), to J. H. Allan, 59 Breck Road, Liverpool.

OUTDOOR Assistant; gentlemanly; 23 or 24; one from a good country house not objected to; half-day holiday weekly; occasional Sunday duty. Address, with full particulars and carte, to E. J. C. 38 Southwark Street, S.E.

WANTED. Chemist (qualified) for Drug department in Co-operative Stores in London. Address, stating age, experience, salary required, and if disengaged, to Secretary, Law Co-operative Supply Stores (Limited), 44 Gutter Lane, London, E.C.

WANTED, an energetic young man, who must be well up to his business, for branch or principal establishment. Apply, stating age, salary required, and references, E. C. Ashford, 32 Gold Street and 27 Horse Market, Northampton.

E. MARRIOTT & CO., Hastings, Dispensing and Homœopathic Chemists, patentees of the "Lily" Baby-comforter, &c., require a qualified Assistant, outdoors; aged about 30 to 40; apply with references, stating age, salary required, &c.

C. F. LOGGIN is in immediate want of a qualified man (outdoors); send photo (to be returned), also state age, height, and usual particulars; easy hours; alternate night duty; another assistant kept. "Chemist," Stratford-on-Avon.

A QUALIFIED Assistant, about 23; must be a good business man, smart and active; with 6 other counter hands under him; salary £50, indoors; Wesleyan preferred; no Sunday duty. Apply, with references, to Messrs. Dixon & Co., Exchange Walk, Nottingham.

JUNIOR Assistant wanted, for Mixed country trade; active, and of agreeable manners; hours, 8 to 7; Saturdays 10. State age, salary, &c., either in or out doors, with photo (to be returned), J. A. C. Boyden, Chemist, Wine and Spirit Merchant, Pocklington, Yorks.

WANTED, several smart Juniors, and one qualified Assistant (the latter as Senior or Manager); liberal terms to active, reliable young men; store experience not objected to. Address, Mosley, care of Messrs. Ismay & Sons, Wholesale Druggists, Newcastle-on-Tyne.

WANTED, a qualified and energetic Assistant, of gentlemanly appearance and address, for a first-class Dispensing and Family business in one of the principal towns in Yorkshire. Address, in the first instance, R., care of Messrs. Davy, Yates & Routledge, Southwark Street, London, enclosing carte, and giving the usual particulars of age, experience, and salary required.

WANTED, a Qualified Junior Assistant; state salary required, outdoors, when at liberty, and other usual particulars, to W. King Chemist, Huddersfield.

WANTED, at once, for Drug Counter, competent Assistant, accustomed to quick trade. State age, height, experience, salary required, and enclose carte, to Henry Hodder & Co., Broad Street, Bristol.

A COMPETENT Assistant; qualified, and of good address; capable of taking management of a good-class Dispensing Business. Apply, stating salary, height, age, &c., F. H. Davies, Chemist, Thornton Heath.

JUNIOR wanted for light retail, first week in September; must be quick and intelligent: state full particulars, salary required, and references: ample time for reading during the afternoon. "L.R.C.P.," 76 Lozells Road, Birmingham.

WANTED, an Assistant, with Major qualifications, with a view to intimate succession, or partnership would be entertained. Send full particulars to "Beta," care of Messrs. Davy, Yates & Routledge, 64 Park Street, Southwark, London, S.E.

IMPROVER or Junior, in Light Country Business: Churchman, and one used to country business preferred; time allowed for study. State age, height reference, salary required indoors, and photo if convenient, to J. Gibbs, Chemist Upton-on-Severn, Worcester.

IMMEDIATELY.—A Qualified or competent Assistant, under 30, outdoors, no Sunday duty, for a Mixed country business, with heavy goods, oils, paints, &c; state salary required, and give reference to last employer; one who can Prescribe and Extract Teeth preferred. Address, J. Morton, Ramsbottom.

WHOLESALE.—A thoroughly experienced man wanted, capable of taking management and control of Wet Department; must be accurate and quick, and be able to produce unexceptionable references. Address, stating salary required, &c., W., care of Messrs. S. Lambert & Co., 137 Fenchurch Street, London, E.C.

WANTED, for a large Retail Drug business, a qualified Assistant, able to dispense, prescribe, and extract teeth: must be active and thoroughly obliging to customers; very liberal terms will be given to a good man. Apply by letter, enclosing references and photo stating salary required, H., care of Raimes & Co., Wholesale Druggists, York.

SITUATIONS WANTED.

1s. for twelve words; 6d. for every six words beyond.

ASSISTANT (25); 9 years' experience. C. C., 195 Seven Sisters Road, N.

JUNIOR (19): London preferred; time for study; good reference. Soanes, Hamptou, Middlesex.

ASSISTANT; aged 23; good experience and references. Jones 4 Guildford Crescent, Cardiff.

TEMPORARY: Senior, Manager; experienced; Minor; 32; tall. T., 49 Gillespie Road, Highbury, N.

LOCUM-TENENS.—Disengaged September 3. "Locum," Longstaffe, 3 Hilton Terrace, Fulham Road.

WHOLESALE Drug or Sundries: young man seeks situation. "Radix," 41 Woodville Road, Walthamstow.

A MAJOR, aged 23 first-class experience, requires temporary situation; disengaged September. X. Y. Z., 1 Lavender Hill, S.W.

ASSISTANT or Manager of Branch: good Dispenser and Prescriber; aged 24. J. B., 43 Chesham Street, Great Horton Road, Bradford.

SITUATION, with time for attending lectures, near Wills's: 7 years experience; good references. Geo. Bray, Wiggaton, North Petherwin, Launceston.

DISPENSER; with time to attend evening classes preferred: Hall qualification; excellent references; aged 24. Address, "Kino," 53 Derby Road, Croydon.

JUNIOR (20); medium height; the North or Midland counties; good references: 5 years' experience; Prelim.; disengaged. "Statim," 114 Stretford Road, Manchester.

YOUNG MAN seeks situation as Drug Porter: used to wet counter in Wholesale Druggist's; abstainer; good references. Apply, A. C., Coulsdon Street, Coulsdon, Surrey.

WHOLESALE.—Wet Counter.—Wanted, situation as above (London preferred): experienced: excellent references. B., 10 Alexandra Terrace Londesborough Street, Hull.

MR. S. SMITH, Bristol, takes Confidential Management during absence or illness, or Branch; varied experience. Present address, 2 Market Place, Witney, Oxon. Disengaged September 26.

LONDON.—Dispenser or Assistant; time for study. L., 10½ Tadman Street, Hull.

WANTED, part-time situation in London. C., 229 High Road, Kilburn, N.W.

TEMPORARY or Manager, by Chemist out of business. "Minor," 59 Miranda Road, N.

JUNIOR: permanency; aged 23; 5 years' experience. "Alpha," 35 Walcot Street, Bath.

SHEFFIELD or Nottingham; time for classes (21). "Mel," 11 Queen Street, Leek.

IMPROVER; indoors: steady and trustworthy; time allowed for study. E. Faull, Warrington.

LOCUM-TENENS during absence; long experienced; gentlemanly, address; moderate terms. "Ph. Ch.," 39 Powis Square, W.

ENERGETIC Branch Manager; disengaged September 12; unqualified; single; aged 36. "Peritus," Pharmacy, Whitstable.

MANAGER, Senior, or Dispenser; qualified and registered; experienced; sober; good reference. L. D., care of Mr. Moore, 1 Fetter Lane, London.

AS Manager; outdoors; 14 years' good all-round experience; Minor; height 5 ft. 7 in. Address, T. G., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

CHEMIST and Druggist.—Assistant, having 13 years' experience of the trade in general, is open to an engagement; engaged at present. Address, T. J. A., Berlin House, Harwick Square, Buxton.

BRANCH Manager; London or near; qualified; married; 20 years' town and agricultural experience; successful Prescriber; energetic reliable; now disengaged. Keeley, 7 Albert Square, London, E.

LOCUM-TENENS or Manager, by experienced Pharmaceutical Chemist: examined; married; disengaged early in September. Benjamin Heald, of Sleaford, care of Roberts, Pharmaceutical Chemist, Millom, Caruforth.

TO Wholesale Manufacturing Chemists.—As Wet Counterman or position of trust in a good house; over 8 years' Wholesale, besides Retail experience; highest references. 162/23, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

YOUNG MAN (21) requires a Branch management; one that requires working up and could be ultimately purchased preferred; highest references; two years in dispensary; tall; prescriber and dresser. "Alhus," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

ANALYTICAL and Consulting Chemist, open for engagement as Manager; 20 years' practical experience in Pharmaceutical, Chemical, Photographic, Manufactures; holder of important discoveries in connection with above; highest references. 117/73, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

MISCELLANEOUS.

Special charges are made for Advertisements under this heading which can be obtained on application.

ATTRACTIVE ADVERTISING.—An able advertisement writer furnishes original ideas, grotesque, humorous, sensational, and scientific ads., suiting all kinds of business, descriptive articles, and pamphlets: medical advertising for legitimate specialties. "Biz," care of Stokes, 31 New Oxford Street.

PRELIMINARY AND MINOR.

ALL Students who are preparing should send for particulars of a method of study which will enable them to pass with ease. Enclose stamped envelope to Mr. J. Tully (Hill's Prizeman), Chemist, Hastings. Established 1872. References to past and present Pupils. Student's Herbarium, 100 specimens, 7s. 6d., post free.

STUDENTS' AIDS TO EXAMINATION.

PRELIMINARY.—Arithmetic and Metric System, 1s. How to Write an Essay, 3d. Cæsar Simplified, 1s. Knotty Points in Latin Grammar, 1s. 6d. MINOR.—Equations Simplified, 1s. Illegible Autographic Prescriptions, 1s. Notes on Dispensing, 1s. Prescriptions given at the Minor, 6d. "Chemist," care of Mr. J. Edwards, Wye, Kent.

ROUSE'S STANDARD CARMINE

(CHEM. PURE).

One ounce Tins, 1/8; post free for P.O., or through any Wholesale House.

Improved and original formulæ given with each tin for the preparation of Face Powders, Bloom of Roses, Liquid Cochineal (labels for these supplied gratis), and practical suggestions and formulæ for its economical use in Tooth Pastes, Tooth Powders Rose-leaf Powder, &c.

ROUSE & CO., WIGMORE STREET, LONDON, W.

Printed by SPOTTISWOODE & Co., New-street Square; and Published at the Office, 42 Cannon Street, in the City of London.—*August* 23, 1890.

WHY PAY RENT

FOR SPACE TO SUPPLY SOAPS WITHOUT PROFIT?

We are now advertising probably as extensively as anybody in the Soap Trade. We supply as high a class of Soaps as has ever been manufactured, and the world-wide and fast growing demands for our products, and the good profit they bear as compared with competing lines, makes it *apropos* that we should speak a few plain words to our friends among the Chemists. We have supplied an extremely large number of Chemists with goods on exceptionally liberal terms. So far as we have been able to ascertain, the cutters have not been guilty of cutting our goods extremely, and we shall therefore be happy in the future, as in the past, to execute orders for all; ***but if, for private reasons, any think proper to cut our goods extremely, we shall at once refuse to execute their orders on our best terms.*** We recognise the fact that the Chemist must live off the profit of some of his sales; we also recognise the fact that the Soap Trade has been so extremely cut that the only possible object he could have in doing it was to make it a kind of advertisement or a sort of convenience for his customers, so that really what little Soap Trade was left to Chemists was not worth doing. We insist upon it that if the cutter wants to sacrifice anybody's goods for the sake of an advertisement, he can sacrifice somebody else's than ours. Our policy is, and has been from the very first, to keep up the prices of all our preparations, in order to amply repay all for the trouble and expense of handling them, and also to make it most profitable for them to bring our goods to the front, and to supply them instead of inferior articles upon which little or nothing is made. If the Chemist supplies the public for the public's convenience, he is dealing with a thankless master. If he is handling goods as an advertisement solely, he is pursuing a comparatively ineffectual and unprofitable policy.

The only objection that has ever been raised against "Vinolia" Preparations is that they are somewhat high-priced; but they are the easiest preparations to sell to customers who want a really good thing. "Cheap and nasty" has long been the order of the day in soaps, and "a new departure" is now in order. We prepare and supply all the "Vinolia" Preparations with such extreme care and untiring attention to every detail, and with such taste and skill, that there are no such presentable and high-class products of the same kind in the English market—indeed, they are *sui generis.*

But a word more as regards expense.—We have just introduced a Floral "Vinolia" Soap, which retails at 6*d.* a cake. This is a milled soap, guaranteed absolutely neutral, is made from the very choicest materials, charged with absolutely innocuous floral scents, and contains extra cream, which is not to be confounded with any of the fatty substances introduced in other soaps, and does not turn rancid. We also have a 1*s.* Shaving Stick.

Finally, we protect all, and so enlist the interests of all; for, if the retailer makes no profit, he can have no substantial interest in keeping our goods to the front. It will be noted that there are no goods brought forward so prominently by Chemists as ours, that there are none of the same class so profitable to handle, and that the retailer had better sell dozens of boxes of "Vinolia" Soap than a box of some ordinary toilet soap now and then that may seem to bear more profit, but ***when quality, large sales, and aggregate profits are taken into account, is nowhere in comparison.***

The practical question arises—Why pay big rents without doing all the business you possibly can? Our travellers tell us that before we introduced "Vinolia" Soap, the trade in soaps had passed pretty well out of the hands of pharmacists. We advertise in the medical journals and the leading magazines and periodicals in Great Britain, and invariably state that our goods can be obtained from the Chemists, and the result is that we have succeeded in placing a good business in their hands. The Chemists should bear this in mind: as we stand by the Chemists, we naturally expect that the Chemists will stand by us; and in doing so they will not need to trouble themselves very much with the question—"Why pay rent?" for the large, fast growing demand for our goods, together with the good profit they yield when purchased direct, makes it well worth the while of every Chemist, not only to keep them in stock, but to push them to the front at all times in preference to imitations, because "Vinolia" Soap assists the Chemist, not only to pay his rent, but to have something left over for old age.

PRICES:—"VINOLIA" SOAP (Floral), 6d., (Balsamic, Medical), 8d.; Otto of Rose (Toilet), 10d., Shaving, 1s., 1s. 6d., and 2s. 6d. per stick, and flat cakes in porcelain-lined metal boxes, 2s. "VINOLIA" (a Plastic Emollient Cream for the Skin in Health and Disease, for Itching, Eczema, Sunburn, &c.), 1s. 9d., 3s. 6d., and 6s. per box. "VINOLIA" POWDER (a Soothing, Soluble, Rose-dusting Powder, for the Toilet, Nursery, Skin Irritation, &c.), 1s. 9d., 3s. 6d., and 6s. per box.

BLONDEAU ET CIE., RYLAND ROAD, LONDON, N.W.

EXCHANGE COLUMN.

This Section of "The Chemist and Druggist" must be closed for press by Thursday noon of each week. Remittances payable to EDWARD HALSE.

TERMS.

Advertisements in this department must be paid for in advance. From this rule no deviation can be made. Insertions are charged at the rate of ½d. per word, provided the advertiser attaches his name and address, for each word of which he must also pay at the same rate; or if he pays 1d. per word, his name and address will be registered and a figure attached to his advertisement. All correspondence referring to that figure must be addressed to "The Publisher of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.," and the figure must be distinctly endorsed upon the envelope. Letters will then be forwarded to their proper destination. A price is counted as one word, as *e.g.*, £1 10*s.* 6*d.*

DEPOSIT OF MONEY.—In order to ensure safety we offer the following system:—The purchaser of anything advertised in the Exchange Column may remit the amount to us, accompanied by a commission of 6*d.* if the amount is £3 or under; and 1*s.* if over that sum. We acknowledge receipt of deposit to both parties, and hold the money until we are satisfied that either the goods are returned to their original owner or the purchase is completed.

Postal orders and cheques sent as deposit must be made payable to Edward Halse, and crossed "Martin & Co."

FOR DISPOSAL.

Literature.

Seventeen volumes *Medical Gazette*; what offers? 162/7.

Educational.

Materia medica collection, suitable for Minor student; cheap. Shaw, 2 The Parade, Bexley Heath.

Major Text-books, splendid condition; Attfield's "Chemistry," Watts's "Organic and Inorganic," Thorp's "Metals," Remson's "Chemistry," Ganot's "Physics," Prantl's "Botany," Wills's "Advanced Materia Medica," Muter's "Analytical Chemistry," Bentley's "Botany." "Major," Trinity Square, S.E.

Formulæ.

Reliable recipes, 6*d.* each; full set of 130 neatly copied in book, 7*s.* 6*d.*; send for list. "Chemist," Edwards, Wye, Kent.

Brooks's Recipes.—Depurative saline, perfectly soluble, 10*d.* lb.; "Sweet Memories," new invigorating bouquet; oatmeal and white rose lotion, specialty for seaside, cooling and purifying; tic specific, magic cure, instant action, very reliable; recipes, with instructions, post free 7*d.* each, 3 for 1*s.* 6*d.*; list of 400 free. Tom Brooks, Chemist, Hornsey, N.

Something new.—Sweet solid perfumes.—Enchanting, delicious odours, everlasting, entirely unique, easily made, "Floral Bouquet," "Moss Roses," "Heliotrope and Musk," "Old English Lavender," "Carbolyptol," for preventing contagion; "Camphoreseum," destroys moths, fleas, &c.; these retail 2*d.* The six recipes, with full instructions, and two samples of each, post free, 5*s.* Tom Brooks, Chemist, Hornsey, N.

Shop Fittings.

Counters, 2 solid mahogany, with plate-glass fronts, one 12 ft. long, and one 11 ft. 6 in., price 25*l.* the two, or would sell one. Philip Josephs, 54 Old Street, Goswell Road, London.

Dispensing-screens, nests of drawers, desk and case, wall-cases, sponge-cases, carboys, and everything suitable for chemists; great bargains. Philip Josephs, 54 Old Street, Goswell Road, London.

Counter-case, bent plate-glass, 4 ft. long, 1 ft. 11 in. wide, price 65*s.* Philip Josephs, 54 Old Street, Goswell Road, London.

½-gall. Maw's tincture-press; ½-gall. graduated glass percolator; 2 glass specie-jars (metal tops), 18×10 (about); 2 glass cases, shelved, 15×24×2⅝; cash offers for either or lot. Smith, Chemist, Coleford, Gloucester.

Second-hand shop fittings, show-cases, shop-rounds, specie-jars, carboys, pill-machines, utensils, and every necessary for chemists commencing or fitting up branch shops, at half the usual prices; state requirements or call. Natali & Co., 184 Aldersgate Street, London, nearly opposite Maw's.

A large quantity of chemists' fittings and utensils, very cheap; or exchange. Wall-cases, counters, counter-cases, sponge-cases, desk and cases, dispensing-counters, dispensing-screens, drawers, lockers, shelving, cornices, upright cases for wall and counter, drawers for under counter; a number of silvered glasses in frames, several with 1-inch bevelled edges; specie-jars, ointment-jars, bottles, pill machines, scales, carboys, outside lamps (globe and square), dentists' outside cases, mortars. Send requirements, and particulars of nearest, with drawing, will be forwarded. Also a grocer's fixture, with canisters, butter block, scales, dummy cheese, &c., &c. Ekanah Natali, 207 Old Street, London (almost opposite Great Eastern Street).

12-ft. run of (60) mahogany drawers, lockers, shelving, uprights, &c., at low price; ditto, with silver plate-glass cupboard between the shelving (over drawers); 10 ft., 12 ft., 16 ft., and 20 ft. run at low prices; piano wall-case, as Maw's A 83, 8 ft. long, to be sold a bargain; dispensing-screens, as A 54 and 55, Maw's list, 4 ft., 5 ft., and 6 ft., from 70*s.*; wall-cases, as Maw's A 86, 7 ft. 6 in. long, 9 ft. high, mahogany, polished, cheap; ditto, ditto, 6 ft. long, stained as mahogany, 7*l.* 10*s.*; ditto, 3 ft. 2 in. long, and 7 ft. 9 in. high; sheet-glass wall-case, 42 in. long by 49 in. high; ditto, 45 in. long by 46 in. high; ditto, 49 in. high by 23 in. wide; ditto, 43 in. high by 58 in. long; ditto, plate-glass, 63 in. high by 51 in. long, all at low prices; glass show-stands, as Maw's, fig. 4, 5, 6 at low prices, as Maw's A 37; mahogany counter, 15 ft. by 52 in., with carved trusses and drawers at back; ditto, 11 ft. 6 in.; several others cheap; a cheap line of plate counter, mahogany top, from 6 to 12 ft., cheap. Ekanah Natali, 207 Old Street (Shoreditch end), London, E.C.

Good well-fitted counter, 10 ft. long, two nests of drawers; 1 doz. 4-lb. blue ointment-jars. Tomlinson Bros., Preston.

First class modern mahogany drawers, with bevelled-glass labels, also show-cases, carboys, bottles, &c.; will sell very cheap, as space is required. Moore & Co., 7 Lord Street, Preston, Lancashire.

Miscellaneous.

Suppository-mould, new, cost 6*s.* 6*d.*; pessary-mould, new, cost 1*l.* 1*s.* 6*d.*; offers. 160/17.

5/100 boxes choice cigars, 8*s.* 9*d.*, cost 11*s.*; 4/50 foreign, 7*s.*, cost 10*s.* 6*d.*; 4/50, 4*s.*, cost 5*s.* 6*d.* Slater, Beeston Hill, Leeds.

Sherwin disc mill, almost new, cost 5*l.* 5*s.*, cash price 60*s.* Thomas Hopkinson & Co., Wholesale Druggists, Nottingham.

Jubilee envelopes, with cards, for disposal unsoiled. Offers to Pratt, care of Mrs. Janes, Beaudesert, Leighton Buzzard.

Surplus stock.—Opoponax, heliotrope, frangipanni, jockey club, stephanotis, &c., all No. 30, in 20-oz. original bottles, 7*s.*; sample, 3*d.* 161/35.

"Chemistry, Analysis," Muter's; "Chemistry," "Botany," Wills'; "B. P.," 1835; Cook's "Botany"; chemicals and apparatus, new; offers. Englisch, Huntingdon.

Lynch's double-action tincture-press, 1 gallon, cost 4*l.*; also pair large beam-scales, with weights up to ½-cwt. inclusive, both nearly new; what offers? H. Richards, Chemist, Bath.

Two ladies' abdominal belts (24); Harness's electropathic belt for lady; Quain's "Dictionary of Medicine," all new; what offers? Clark, 29 Bordesley Green Road, Birmingham.

Job lots of mineral-water and other bottles; 100 gross split lemons; 50 gross 10-oz. square dark coffee extracts; 30 gross cherry brandy quarts; what offers to clear? 85/61.

WANTED.

A two or three grain pill-machine; dispensing-scales. 162/6.

Patents and sundries; exchange Howard's quinine, or good brass enemas. 119/12.

Shop-fittings, &c.—All descriptions purchased for cash. Natali, 184 Aldersgate Street, E.C.

Set dental forceps; Herman's "Physiology." Particulars and price to Thomas, Chemist, Newcastle-Emlyn.

JOHNSON & JOHNSON

NEW YORK and LONDON,

MANUFACTURING CHEMISTS,

MANUFACTURERS OF ALL VARIETIES OF

MEDICINAL AND SURGICAL PLASTERS IN RUBBER COMBINATION

(PERFORATED AND PLAIN), AND ISINGLASS AND MUSTARD PLASTERS.

ALSO MOIST ANTISEPTIC DRESSINGS & ABSORBENTS.

MUSTARD PLASTERS.

We are now preparing Mustard Plasters after an entirely New Process.

Mustard Plasters have always given some trouble to both Physician and Pharmacist, by reason of decomposition from age, thus becoming inert. After years of careful manipulation we have been able to overcome this difficulty, and the Mustard Plasters prepared by us are guaranteed in every way.

ON APPLICATION WE WILL MAIL TO ANY CHEMIST'S ADDRESS A SAMPLE OF OUR

NEW PROCESS MUSTARD PLASTER,

A comparison of which with any other brand will show them to be much superior.

THEY WILL KEEP BETTER.

THEY WILL GIVE BETTER SATISFACTION TO YOUR CUSTOMERS.

THEY ARE STRONGER THAN ANY OTHER MAKE.

IMPROVED

BELLADONNA PLASTERS

(WITH BORACIC ACID).

INCREASED ACTION.

We have succeeded in greatly increasing the therapeutic value of Belladonna Plasters.

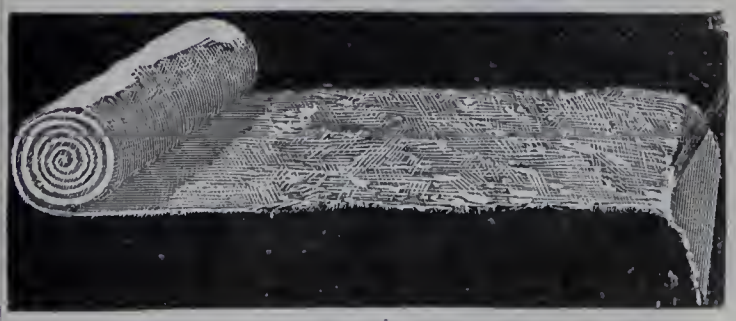
FIRST.—By preparing the mass in a manner calculated to promote a more rapid absorption of the incorporated drug.

SECOND.—By employing a more reliable extract of the drug than is commonly used.

THIRD.—By the addition of Boracic Acid and a mild rubefacient, by which the activity of the cutaneous glands is stimulated, and their power of absorption increased.

Samples to any Physician's or Chemist's address on application.

ABSORBENT COTTON IN EVEN SHEETS
Rolled with Tissue Paper between them to prevent felting.



Cotton in this form is as easily applicable as an ordinary cloth bandage. Its advantages can be seen at a glance. Supplied in all sized Packets from 1 oz. to 1 pound.

Our goods can be obtained from all the leading Wholesale Houses in Great Britain and Ireland, or from us direct.

PRICE LISTS AND ALL INFORMATION ON APPLICATION TO

JOHNSON & JOHNSON, LIM., 1 & 2 AUSTRALIAN AVENUE, E.C.

When ordering through the Wholesale Houses care should be taken to specify the goods JOHNSON & JOHNSON'S Manufacture.

JEWSBURY & BROWN'S
(MANCHESTER)

SPARKLING TABLE WATERS,
UNRIVALLED FOR PURITY AND QUALITY.

SODA WATER.
SELTZER WATER.
POTASH WATER.
LITHIA WATER.
SIMPLE AËRATED WATER.

LEMONADE.
GINGER ALE.
QUININE TONIC.
GINGER BEER.
HOREHOUND BEER

EXTRACTS FROM ANALYTICAL REPORTS.

"The examination of the Waters which I have made has satisfied me that they have been prepared with the greatest care, and are of excellent quality."
FRANCIS JONES, F.R.S.E., F.C.S.

On the whole, I have no hesitation in stating that your Aërated Waters are of the highest standard of purity which is practically attainable."
LOUIS SIEBOLD, F.I.C., F.C.S.

"The Lemonade is, for flavour and general excellence, superior to any similar compound which I have examined, and contains no acid but *Citric Acid*.

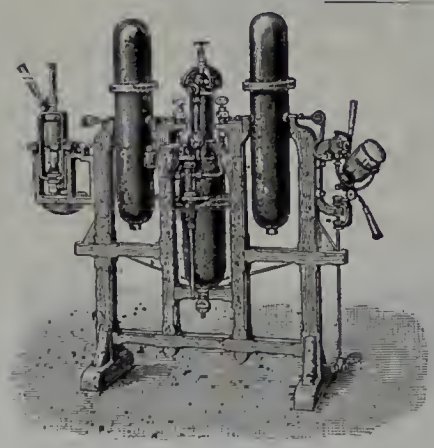
"I took a sample of the water used in your manufactory, in the preparation of the Aërated Waters, and found it, as was the case with the completed compounds, entirely *free* from lead, copper, or *any injurious* matter whatever."
C. ESTCOURT, F.C.S., F.C.I.

J. & B.'s Syphons are mounted with **PURE BLOCK TIN**, thus ensuring absolute immunity from dangerous metallic contamination

CARRIAGE PAID AND ON RETURNS.

113 MARKET STREET, and 44 DOWNING STREET, MANCHESTER.

A. LOZÉ & CO., LD., 281 WEST DERBY ROAD, LIVERPOOL.



INDISPENSABLE TO CHEMISTS.

THE ONLY PRACTICAL SODA WATER MACHINE.

Self-working by Chemical Action. No Skilled Labour.

NOT LIABLE TO GET OUT OF ORDER OR NEED REPAIRS.

Produces the Purest Aërated Water made.

Machines, in two sizes, at 25 guineas and 30 guineas. All complete. With the smaller a lad can make easily in ten hours twenty dozen Syphons or 100 dozen Bottles; with the larger, thirty dozen Syphons or 175 dozen bottles.

COUNTY LABORATORY, 30 BROWNLOW STREET, LIVERPOOL, October, 1889.

I have examined during the present year the Machines for making Aërated Waters invented by Mr. Lozé, and I have formed a very high opinion of them. No lead is found in any part which comes in contact with the water, and the process is one which produces absolutely pure Carbonic Gas. Accordingly I find that the effervescing water produced is free from every injurious metal or contamination, and has a better flavour than that produced in the ordinary way.
J. CAMPBELL BROWN, D.Sc.

CHEMICAL LABORATORY, 20 ALBERT GATE, MANCHESTER, 21st August, 1889.

GENTLEMEN,—At your request I have visited the works of Messrs. A. Lozé & Co., of Prescot Street and Tuebrook, Liverpool. I have inspected his patented Apparatus for producing Aërated Waters, and have analysed the Aërated drinks manufactured. The results of analysis quite justified the inferences which were drawn from a knowledge of the materials used. Thus, instead of using ordinary whiting (as the source of carbonic acid gas), which gives off small quantities of offensive gases when acted upon with acid, Mr. Lozé uses one of the pure soluble bicarbonates of either Potash or Soda; the use of this salt enables the apparatus to be much simplified in form, as no gas washer is required, but the carbonic acid gas may be led at once into the liquid in the Saturating Cylinders. The Aërated drinks produced are of very high quality, both as to purity and as to Aëration, and the apparatus possesses the merit of extreme simplicity and efficiency.—Faithfully yours,
C. ESTCOURT, F.I.C., F.I.

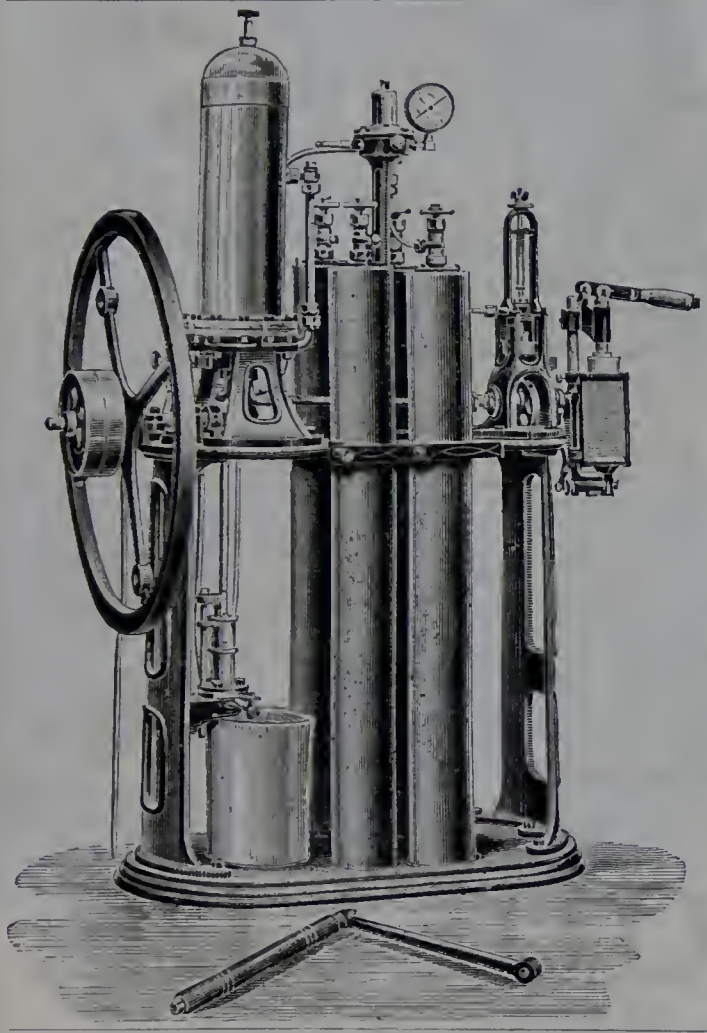
Messrs. A. LOZÉ, & CO., LIMITED. DITTON, 10th April, 1890.

Dear Mr. Lozé,—I am pleased to inform you that I have been able to work the Machine sold to me by you without previous knowledge. With your patent Turnover I can bottle Patent Stoppers at the rate of two dozen per minute. Syphons and Corked Bottles I can fill much quicker than what you advertise the Machine to do.

The Aërated Waters produced have been sampled by a number of gentlemen, and pronounced by them to be of a most excellent quality.—Wishing you every success, I remain, yours truly,
ROBT. J. GOW, F.C.S.

SODA-WATER MAKING

With Liquefied (So-called / Natural) Carbonic Acid Gas.



The "Compact" Machines are designed where space is an object and for those having a large retail trade, such as Chemists, &c., for filling Bottles or Syphons, and are fitted on the one end with either the "Reliance" Syphon Filler or the "Excelsior" Machine for filling Patent Bottles.

No. 1 Size "Compact" Soda-water Machine complete, as shown, comprises a Niagara Cylinder, mounted, complete with all fittings, Reducing Valve, and a Bottling Machine for Syphon Bottles or for Patent Bottles, the latter fitted with Syrup Pump, the whole mounted on a massive cast-iron frame, fitted with shaft, flywheel, with fast and loose pulleys, for steam or other power, and also handle for hand-power.

By opening one of the iron vessels, and setting the Reducing Valve to the required pressure, a stream of gas is let into the Cylinder; pumping the water into the Cylinder by means of the flywheel may then be commenced, and as soon as it shows in the Water Gauge, bottling may be started, and continued while the water pump is being worked. About 50 dozen bottles per hour can be bottled with ease by hand-power.

Price complete, **£60.**

No. 2 Size ditto ditto, with a producing capacity of 25 dozen bottles per hour—

Price complete, **£40.**

LIQUEFIED CARBONIC ACID GAS, in iron vessels containing 28 lbs., which is sufficient to aërate 20 gross of waters, or 3,000 to 4,000 draughts from the Pillar Fountain, as shown below, **10**/- each.

Specimens of Testimonials we are receiving from users of the "Compact" Machine.

From A. THOMPSON, Esq., M.P.S.,
The Putney Drug Stores, 93 High St., Putney, S.W.

"I am more than satisfied with the No. 1 'Compact' Machine which answers my utmost requirements. I find with the aid of a youth I can fill six dozen syphons per hour, including syruping. I have nearly trebled my sale this last three weeks."

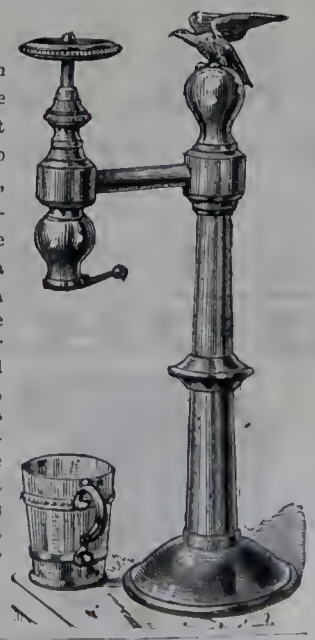
From E. H. TAYLOR, Esq.,
Middle Abbey Street, Dublin.

"The No. 2 'Compact' Soda Water Machine came to hand the day previous to the Great Annual Temperance Fête at Ball's Bridge, where it had an engagement to supply 15,000 visitors, or over 200 dozen of waters. I felt nervous, not having a knowledge of the machinery. However, I got it together without a hitch, and after two dozen being bottled, I cannot describe the weight I got from under. I saw that we could turn out double the quantity, as even with temporary fixing, it filled 42 dozen per hour, and with a better trained attendant, will, I am sure, go close on fifty. I wired you this afternoon to know when you can deliver another No. 2 Machine, for a party who came a distance to see it work to-day. Congratulating you on your success."

From Messrs. TURNER, SCHON & CO.,
101 Leadenhall Street, E.C.

"We thought we should have great difficulty in the manufacture of aërated waters to which we were absolute strangers. Now that your No. 1 'Compact' Machine is fitted up and we have had an opportunity of working it, we find it is simplicity itself, and are surprised it should be possible to put such an effective and complete machine into such small compass. We think the machine will prove a great success, and we shall be happy to show it to intending purchasers."

PILLAR FOUNTAIN.



For a Single Draught Arm fixed on Counter, as shown by this drawing, there is nothing more convenient, the great advantage of it is, that a small sharp stream of Aërated Water can be drawn, which, when Syrups are taken, is absolutely necessary, so as to mix up the Syrup with the Water first, and then a large stream, as in the emptying of a bottle of soda water can be drawn; where soda water alone is required, the latter retains its sharpness and pungency, and thus, by the use of *this* Draught Arm, there is no necessity of drawing the soda water into a bottle first, and then emptying it into a tumbler, thus is avoided the loss of gas, and also the loss of time; but by drawing direct into the drinking glass a more satisfactory result is obtained. It is of very solid construction and thickly plated.

Price £4 7 6

Send for Illustrated Catalogue "C," containing all preliminary information. Forwarded free on application to

BARNETT & FOSTER, "NIAGARA" WORKS, 26t Eagle Wharf Road, LONDON, N.

TO AERATED WATER MANUFACTURERS

HAY'S (REGISTERED) SOLUBLE ESSENCES

ARE GUARANTEED TO BE THE FINEST IN THE MARKET

ESSENCES OF GINGER, LEMON, ORANGE &c.

HOP ALE AND GINGER ALE ESSENCES.

Besides GOLD & SILVER Medals, these Essences have obtained the HIGHEST TESTIMONIALS from all the Medical Journals & from the Principal Trade Journals in this & other Countries.

W. HAY, MANUFACTURING CHEMIST BEVERLEY RD. HULL

PRICE LISTS FREE ON APPLICATION.

KRONENQUELLE.

THE FAMOUS NATURAL MINERAL WATER.

For Gout, Gravel, Rheumatism.

For Kidney and Bladder Diseases.

TO BE OBTAINED THROUGH ALL WHOLESALE HOUSES. [1]

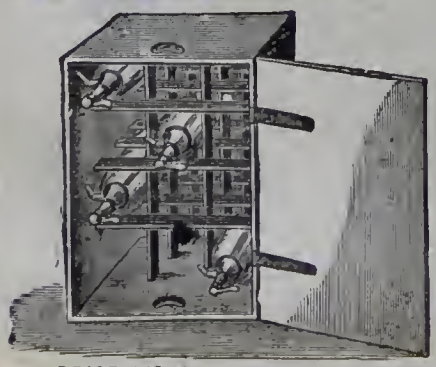
SOLE AGENTS, W. SCHACHT & CO., 26 Finsbury Pavement, LONDON, E.C.

JOHN OWEN, JUNIOR,

PACKING CASE MANUFACTORY AND STEAM SAW MILLS.

ESTABLISHED 1840.

37 & 38 MINORIES, LONDON, E.C.



MANUFACTURER OF
Cases of every description for Home use and Exportation.
Wine Laths, Oak and Deal.
Mineral Water Bin Cases and Trays.
Bottle Crates. Straw Envelopes.
Cases Lined with Tin, Zinc, Copper, &c.;
ALSO MANUFACTURERS OF THE
"Acme" Incubator & Poultry Appliances.

PRICE LISTS FORWARDED ON APPLICATION. EXPORT ORDERS RECEIVE SPECIAL ATTENTION.

SYPHONS & SELTZOGENES

GREAT REDUCTION IN PRICE.

We have recently been entrusted with a most important Agency for the above-named goods. Our Principals are the best known firm in Paris, and the Syphons are undoubtedly the cheapest and strongest in the market. The tops are made of pure English Tin, guaranteed free from lead. The Seltzogenes are made on the well-known "Fevre" system, and each one is thoroughly tested before being sent out.

WE CAN GIVE TO LARGE AND SMALL BUYERS EXCEPTIONALLY LOW PRICES.
PLEASE WRITE US AT ONCE FOR PRICES, STATING QUANTITY OF EACH KIND REQUIRED

SODA-WATER MACHINERY.

MELBOURNE EXHIBITION, 1889, UNPRECEDENTED SUCCESS.

We have obtained at the above Exhibition

3 HIGHEST AWARDS POSSIBLE

A feat never accomplished before by any other house supplying requirements for the Aërated Water Trade.

These awards will carry with them **THREE GOLD MEDALS,** which were awarded as follows:—

1st—SODA-WATER MACHINERY (Highest Award possible).
1st—ESSENTIAL OILS & FRUIT ESSENCES (Highest Award possible).
1st—PATENT AND ORDINARY BOTTLES (Highest Award possible).

WRITE FOR NEW ILLUSTRATED CATALOGUE, POST FREE.

BRATBY & HINCHLIFFE, LIM.

Aerated Water Engineers and Glass Bottle Manufacturers,

SANDFORD ST., ANCOATS, MANCHESTER

And at 146 MINORIES, LONDON, E.C.

"LET NOT THE SUMMER PASS"

BEFORE YOU HAVE GIVEN

DE CARLE'S SOLID FRUIT JUICES

A TRIAL,

But **send at once** 10/6, and have a 3-doz. Case to retail at 4½d. per Packet, assorted flavours, viz., Lemon, Orange, Raspberry, Pineapple, Cherry, Lime Fruit, Ginger, &c., together with an abundant supply of Handbills, a Show-card in seven colours Free, and Samples for counter distribution, **Carriage Paid** to any address in the United Kingdom, on receipt of Postal Order for 10/6.

REPEAT ORDERS AND TESTIMONIALS CONTINUE TO COME IN FROM ALL PARTS.

DE CARLE & SON, MANUFACTURING CHEMISTS, NORWICH

From whom Samples, Prices, and full particulars can be obtained.

Obtainable through all London Houses; also EVANS, GADD & CO., EXETER; FOGGITT, THIRSK, &c., &c.

LEMON-RASPBERRY

REGISTERED LABEL.

A delicious beverage, non-alcoholic and perfectly pure; guaranteed to be prepared from fresh and specially selected Fruit only.

LEMON-RASPBERRY is unrivalled for use with Mineral Waters.

LEMON-RASPBERRY is bottled in special bottles, and is attractive in appearance and agreeable in flavour.

SAMPLES & QUOTATIONS MAY BE OBTAINED ON APPLICATION FROM THE SOLE MANUFACTURERS,

A. MILLAR & CO.

THOMAS STREET, DUBLIN.

MASON'S

EXTRACT OF HERBS

IS THE

ORIGINAL

AND

BEST

For the production of Botanic Beer, a non-intoxicating beverage, full of body and flavour, with a creamy head like Bottled Ale. The most perfect substitute for Alcoholic Drinks ever discovered for either Summer or Winter.

WARNING

TO THE

TRADE.

Numerous imitations are being offered, but none can compare with ours.

SOLD IN BOTTLES,
6d., 1s., 2s., and 5s. each.

Sole Inventors and Manufacturers—

NEWBALL & MASON, Manufacturing Chemists and Botanic Druggists, **NOTTINGHAM.**

LIQ. KAVA KAVA CO.

(POTTER & CLARKE'S),

A fluid extract of Kava Kava, Hydrastis, Uva Ursi, &c., for Gonorrhœa, Gleet, Leucorrhœa, and affections of the Urinary Organs.

We have confidence in recommending the above preparation to the notice of our friends as a substitute for Copaibæ Compounds. It is devoid of nauseousness and almost without smell; it does not derange the stomach, but, on the contrary, *has a beneficial action upon the whole system, increasing the appetite and strengthening the digestive organs.* In its action the discharge of gonorrhœa is augmented previous to its cessation, but in most cases, where the usual dietary regulations are carried out, the Liq. Kava Kava Co. may be relied upon to effect a cure in from 8 to 12 days.

In troublesome cases the following injection is recommended: Zinci Chlor. 2 gr. in 3 oz. of water used every 4 to 6 hours. Care should be taken to wash out the urethra with water before giving an injection so that the diseased surface may be fully exposed to the action of the remedy.

In painful micturition and acute vaginitis it is of undoubted efficacy, allaying inflammation and pain, and suppressing catarrh of the urethral mucous membrane when present.

DOSE—½ to 2 drachms in water every 3 or 4 hours.

The following are a few of the Testimonials to the value of this Preparation we are continually receiving. We shall be pleased to pay carriage on sample orders.

"I have been using your Liq. Kava Kava Co. for some time, and it has given me great satisfaction. In some cases I have found it superior to Liq. Copaibæ Co., and have no doubt that when it becomes generally known it will have a good sale."

"I have found your Liq. Kava Kava Co. a very efficient preparation for the purpose it is recommended. It fails less frequently than any other preparation I have used."

"I have great pleasure in saying that your Liq. Kava Kava Co. gives every satisfaction. My patients ask for the same medicine as before."

"Can testify to the efficacy of Liq. Kava Kava Co. in the treatment of Gonorrhœa. It thoroughly cleanses the urethra, reduces the inflammation, and does not disagree with the stomach."

Friends abroad may obtain it through any of the Export Houses.

Price 4/6 per lb. W. Qt. 4/3 per lb.

SOLE MANUFACTURERS—

POTTER & CLARKE

WHOLESALE & EXPORT BOTANIC DRUGGISTS, [2]

5, 6, & 7 RAVEN ROW, ARTILLERY LANE, LONDON, E.

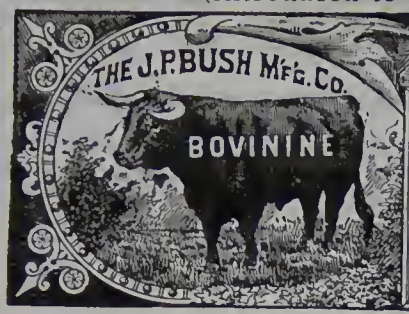
THE FIRST RAW FOOD EXTRACT.

(Introduced to the Medical Profession in 1878.)

AN IDEAL FOOD.

PALATABLE.

KEEPS PERFECTLY.



BUSH'S FLUID FOOD

BOVININE

CONTAINING 20 PER CENT OF COAGULABLE ALBUMEN.

THE VITAL PRINCIPLES OF BEEF CONCENTRATED.

BOVININE consists of the juices of lean raw beef obtained by a mechanical process, neither heat nor acid being used in its preparation. The nutritious elements of lean raw beef are thus presented in a concentrated solution, no disintegration or destruction of the albumen having taken place. The proteids in solution amount to twenty per cent. of the weight of the preparation, and give to it the great dietetic value it possesses in all conditions where a concentrated and readily assimilable food is needed.

BOVININE is entirely distinct from the numberless meat preparations prepared with heat. It is a **Food**, pure and simple, **Highly Concentrated**, and the most **Nutritious** yet presented.

TO CHEMISTS AND DRUGGISTS.

BOVININE has been prescribed and enthusiastically endorsed by thousands of Physicians and Surgeons in the United States and Canada for the past **Twelve Years.** We are systematically introducing **BOVININE** to the notice of the Medical Profession of Great Britain, and many are prescribing it daily. It is sold at prices within the reach of all.

TO BE HAD OF ALL WHOLESALE DRUGGISTS.

In Bottles, 12 oz. (4s. 6d. size), 38s. per dozen; 6 oz. (2s. 9d. size), 24s. per dozen.

THE J. P. BUSH MANUFACTURING CO.

Laboratory at Chicago, Illinois. Principal Office, 2 Barclay Street, New York, U.S.A.

DEPOT FOR GREAT BRITAIN — 32 SNOW HILL, LONDON, E.C.

Fry's Pure Cocoa

To secure this article ask for FRY'S PURE CONCENTRATED

To H.R.H. The Prince of Wales, The Empress of Germany, &c.

BRAND & CO.'S PEPTONES OF BEEF, MUTTON, VEAL, AND CHICKEN.

REPRINT FROM "THE HOSPITAL GAZETTE."

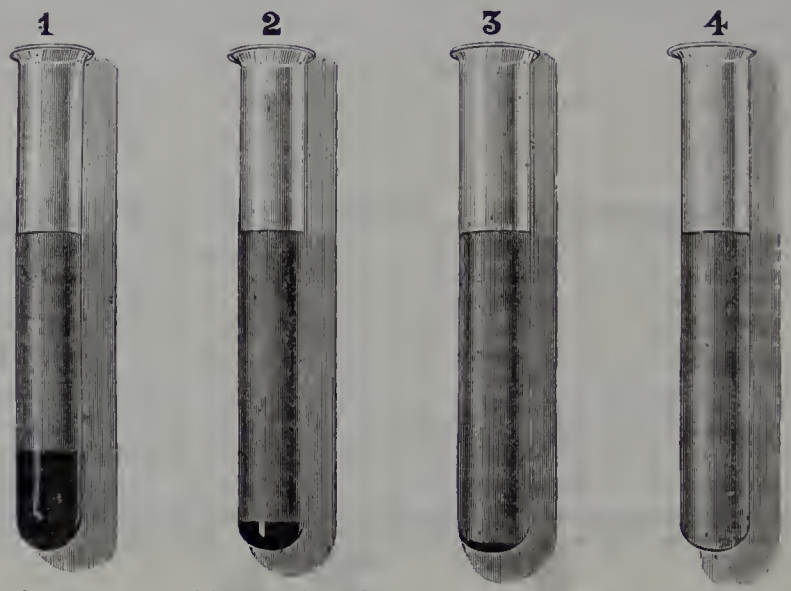
ALBUMINOIDS IN MEAT ESSENCES

By V. H. WYATT WINGRAVE, M.R.C.S.Eng., L.S.A.Lond., Lecturer on Physiology at Cooke's School of Anatomy and Physiology.

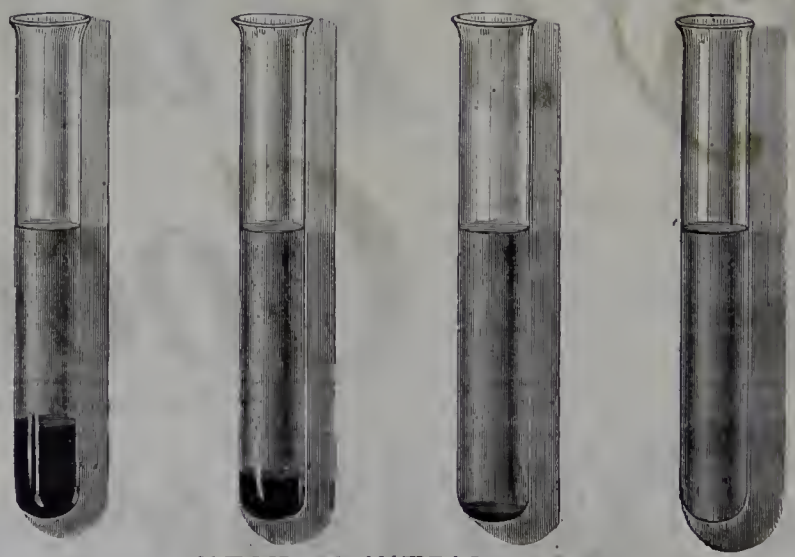
With the object of demonstrating the comparative amount of natural unchanged albuminoids contained in some of the chief preparations of concentrated fluid meat essences now in use, the following simple method was adopted, and which the appended illustrations faithfully demonstrate.

No. 1 is Caffyn's Liquor Carnis; 2, 3, and 4 are other well-known meat preparations.

HEAT ALONE.



The four *upper* tubes represent thirty grains of the respective preparations diluted with ninety minims of distilled water, boiled for three minutes, and allowed to stand for six hours.



HEAT & NITRIC ACID.

The four *lower* tubes represent similar materials and proportions, boiled for three minutes, after the addition of ten minims of pure nitric acid.

From this demonstration it is evident that CAFFYN'S LIQUOR CARNIS contains a much greater proportion of *pure, unchanged albuminoids* than any of the other preparations; 3 and 4 giving almost negative results, the process of manufacture having *entirely changed* or *destroyed* them.

TRADE MARK.

IMPORTANT NOTICE.

The following paragraph by Professor Dr. Fürbringer, *Head Physician of the Staedtisches Allgemeinen Krankenhaus im Friedrichshain, Berlin, appears in the printed report from the Directorate of the said Hospital:—*

"Denaeyer's Peptone has at last been adopted as the new means of nutrition, after trials, which were made on a large scale with a quantity presented to this hospital, had proved the undeniable advantages of this Peptone over all other peptone preparations in use. Among these advantages, special mention should be made of the pleasant flavour—enjoyed by nearly all patients—and of its form, which is a beautiful clear, amber-yellow sterilised liquid, requiring no preparation before being used."

DENAEYER'S

LIQUID STERILISED PEPTONE OF MEAT.

Highly sterilised and concentrated, the only rational one, free from microbes, acknowledged the most efficacious means of restoring Strength, Digestion, and Appetite.

It suits the most fastidious stomach, and is pleasant to the taste.

LIQUID STERILISED PEPTONATE OF IRON.

The most active and assimilable of all ferruginous preparations. Specially recommended in all cases where the stomach cannot bear iron in the ordinary forms.

OF ALL CHEMISTS AND WHOLESALE DEALERS.

DENAEYER'S PEPTONOIDS & EXTRACT of MEAT CO., Lim.

118 BISHOPSGATE STREET WITHIN, LONDON, E.C. 20 RUE VANDERLINDEN, BRUSSELS.

General Agents for Scotland:—

Messrs. DUNCAN, FLOCKHART CO., Edinburgh. THE OLD APOTHECARIES COMPANY, Limited, Glasgow.

CONCENTRATED

PEPTONISED COCOA & MILK

AND CONCENTRATED

PEPTONISED MILK

(PATENT).

These two preparations are made with pure rich PRE-DIGESTED Country Milk, and, by mere dilution with hot water, afford a delicious restorative beverage the assimilation of which requires no digestive effort.

SAVORY & MOORE

LONDON.

Tins 1s. 6d. and 2s. 6d. Obtainable Everywhere.

FLY SEASON, 1890.

THE GREATEST NOVELTY FOR THE YEAR

IS THE

"Roller" Duplex Fly Exterminator.

PATENTED AND REGISTERED.

Vendors desirous of a large trade would do well before purchasing elsewhere to send for samples and terms, and acquaint themselves with the

MERITS, DESIGN, SUPERIORITY, AND NOVELTY

of the "ROLLER" DUPLEX FLY EXTERMINATOR,

Which render it the most attractive and saleable article of its kind.

BIDDLES' FLY EXTERMINATOR

Is acknowleged to be the BEST and MOST SALEABLE ARTICLE IN THE MARKET.

☞ **NOTE.**—The "Sticky" material being now spread with patent and properly adjusted gauges, no complaint can possibly arise as to variation in THICKNESS or OVER-HEAT in any form whatever, and every paper sent direct from the Agents or Factory is guaranteed perfect.

Communications sent direct to the Manufactory receive immediate attention.

BIDDLES' FLY EXTERMINATOR

Merits superiority in DESIGN, FINISH, AND PORTABILITY.
It is STICKY BOTH SIDES, thus catching the flies whichever side they alight.
It is arranged specially for suspension to Chandelier or any convenient position, or it may be laid down on any flat surface.
It is wrapped round a specially-designed "Roller," which enables it to be packed in a small compass, and to prevent the adhesive material dropping on to the carpet or other covering.
Is packed in a small compass and handy for sale.
Its sticky composition is adapted for any climate.
The Tape or Wire around each "Exterminator" is for suspension.
It is warranted free from poison ! !

RETAILS ONE PENNY EACH.

SOLE MANUFACTURER AND PATENTEE,

BIDDLES, READING.

Telegraphic Address—"BIDDLES READING."

To be obtained from all the Wholesale Patent Medicine & Drug Houses & direct from the Factory, Reading, England.

COMPARE, AND THEN DECIDE.

5/9 per Gross.

BOTTLE SHAPE.

PENNY MENTHOL CONES.

BOTTLE SHAPE.

5/9 per Gross.

On ¼-Gross Show Cards, with Elastic. Sample Free.

PETER TYRER, 70 LONG LANE, BOROUGH, LONDON, S.E.

ROBINSON'S
LIEBIG'S BEEF WINE.

Composed of Liebig's Extract of Beef, Extract of Malt, and sound Port Wine.

REPORT ON BEEF WINES.

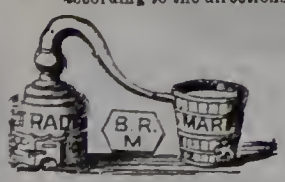
From the results of my Analyses of various **Beef Wines** I have had occasion to examine, none have **equalled** as regards strength, purity of ingredients, and (of no less importance) the skilful and judicious manner in which the respective ingredients have been proportioned and combined, the Liebig's Beef Wine manufactured by Mr. B. ROBINSON, of Pendleton, Manchester.

It is in every sense a reliable preparation, embodying in a pleasing and palatable form all the acknowledged medicinal and nutritive properties pertaining to **Liebig's Extract of Meat, Extract of Malt, and sound Port Wine.**

WILLIAM ELBORNE, F.C.S., F.L.S.,
Lecturer on Materia Medica in the Owens College, Manchester (Victoria University).
December 15, 1888.

Introduced 1855.] **ROBINSON'S CONCENTRATED WATERS.** [Introduced 1855.

One Ounce of these Waters added to Forty Ounces of Distilled Water forms a clear Medicated Water (without filtering), similar in every respect to those prepared according to the directions of the British Pharmacopœia, and free from all Chemical impurity. They will keep good any length of time in any climate.



Aqua Anethi, Concent., 4/ lb.	Aqua Cinnam. Ver. Concent., 6/ lb.	Aqua Fœniculi, Concent., 4/ lb.	Aqua Pimentæ, Concent. 4/ lb.
" Anisi " 4/ "	" Cassiæ " 4/ "	" Menth. Pip. " 4/ "	" Rosæ " 8/6 "
" Camphoræ " 4/ "	" Flor. Aurant. " 8/6 "	" " Ang. " 6/ "	" Rosæ Virgin " 10/6 "
" Carui " 4/ "	" Flor. Sambuci " 8/6 "	" " Virid. " 4/ "	

The above are put up in Bottles of ¼ lb. or 1 lb. and upwards, each of which has the Inventor's Protection Label over Cork.

From the LANCET, *July* 15, 1882:—"CONCENTRATED WATERS (Robinson's, Pendleton, Manchester).—Among the samples sent to us we find Aq. Anethi, Anisi, Cinnam. Ver., Rosæ, and some dozen of others. Diluted with forty parts of water they form the ordinary waters of the Pharmacopœia. They are *excellent in quality*, and will be very useful, especially in country practice. [1]

Wholesale HEARON & Co., London, and most Provincial Wholesale Druggists. PREPARED BY THE INVENTOR.

B. ROBINSON, MANUFACTURING CHEMIST, DISTILLER, AND BREWER OF BRITISH WINES, MANCHESTER

"RAMORNIE." LIEBIG'S Extract of Meat.

As supplied to the Admiralty, War, and India Offices.

1-lb. Jars	per lb. 6/9	per doz. 81/0		2-oz. Jars	per lb. 7/8	per doz.	1/6
½-lb. Jars	" 7/0	" 42/0		1-oz. Jars	" 8/4	"	6 3
¼-lb. Jars	" 7/3	" 21/9		½-oz. Jars	" 8/8	"	3 3

QUOTATIONS FOR EXTRACT IN "BULK" ON APPLICATION.

Write for Detailed Price List to the Australian Meat Co., 9 and 11 Fenchurch Avenue, E.C. *6 lbs. Carriage Free*

BROOKE'S SOAP.

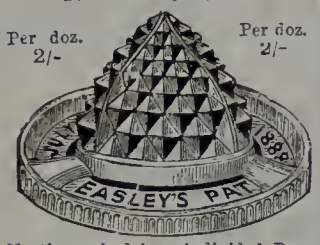
WON'T WASH CLOTHES

Cases of 100 Bars	25/0
" 50	15.0
Boxes of 48 Half Bars ..	6 3

If any difficulty in obtaining, write Sole Consignees.
FORDHAMS, LONDON.
Special Prices to Merchants and Shippers.

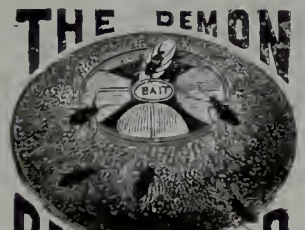
Easley's Genuine American
LEMON JUICE EXTRACTOR.
Sometimes called the
"Last Drop" Lemon Squeezer.
Patented July 10, 1888.

Per doz. 2/- Per doz. 2/-



Neatly packed in sub-divided Boxes of one dozen.
Do not be deceived; every Genuine Squeezer bears EASLEY'S name and date of Patent.
No other make will compare with these.
New Showcard now ready.

THE DEMON BEETLE TRAP.



THE MOST INGENIOUS YET INVENTED.
(Patent No. 2512.)
HAS BEEN PROVED TO
CATCH THOUSANDS
WHERE OTHER TRAPS FAIL

The Queen, Jan. 25, 1890, says: "The 'Demon' is a capital trap, and very effective."

Price 1/, and no further expense to be rid of a Plague of Black Beetles.

Messrs. ROGERS BROS., Ironmongers, Watford, write:— "July 16, 1890. "Dear Sirs,—One of our customers informs us that six of your 'Demon' Traps caught 2,680 beetles in five nights. They are the best Traps we sell."

BROWN PAPER
SPLENDID VALUE AT
10/, 12/, 14/, 16/, 18/, and 21/.

TOILET PAPER
SPECIAL LOT, PERFORATED, 3/ per dozen
Also at 4/, 5/, and 6/ per dozen rolls.

ALL KINDS OF
FLY KILLERS
IN STOCK.

Crane's Square Blue

Two High-class Articles every Chemist and Druggist should Stock.

Crane's Black Lead

POLISHING POMADE.

Large, 19/6 gross.

Small, 7/6 gross.

GELATINE GLUE

Upwards of One Hundred Tons always in stock. If you desire to match a Glue or Gelatine send small sample and ask price.

GARD'S HOUSEHOLD AIDS,
For which we are Sole Agents.

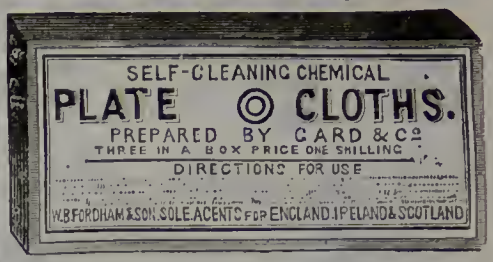
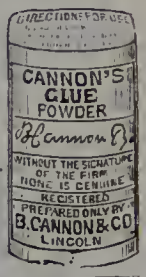


Plate Cloths (3 in a box)	1/-	size.
" "	2/-	"
Brass and Steel "	1/-	"
Jewel "	6d.	"

SIZE AND GLUE POWDER.

CANNON'S
IS THE BEST.
In 4, 8, 16 oz.;
2, 4, and 7 lb.;
28, 56, and 112 lb. Cases.
A Large Stock of each quality in London.



ASPINALL'S ENAMEL.

SALES INCREASING.

130 COLOURS IN STOCK.

ORDERS EXECUTED ON RECEIPT.

☞ Prices in no case higher than the Manufacturer's or other Wholesale Dealer's. Every kind in Tins and per gallon supplied upon receipt of order.

'UNBREAKABLE' SHOW BOWLS

Can be had in any of the following colours:—
Black, Blue, Red, Green, Oak, and White, either Plain or Decorated.

6	7½	9	10½	12	13½ inches.
5/6	9/-	13/6	19 6	22/6	25/6 doz.

We publish an Illustrated Price List, containing a number of useful articles in this ware, which shall be mailed, with our other lists, upon application, to Merchants and Shippers. We are constantly applying our PATENT PULP to new uses; articles made in it have no hoops to rust or fall off, and when more generally known its use will be appreciated all over the world.

W. B. FORDHAM & SONS, LIM., 36 to 40 YORK ROAD, KING'S CROSS, LONDON, N.

ESTABLISHED 1825. TELEGRAMS—"FORDHAMS LONDON." TELEPHONE 7514.

Telephone Number, 1852. Telegraphic Address—CHEMICUS LONDON.

ADVERTISERS' AND BUYERS' REFERENCE LIST AND INDEX TO ADVERTISEMENTS.

ADVERTISEMENTS APPEARING IN THIS ISSUE OF "THE CHEMIST AND DRUGGIST."

NOTE.—The Folios shewn in this Index are those at the FOOT of the Page, and not at the Top. This arrangement is necessary in order to meet the requirements of the Post Office.

Foot of page

Allen & Hanburys .....Cover 1
American Toilet Co. 42
Andreae, Oscar, & Co. 33
Apollinaris Co. (Lim.)....Cover 60
Atkinson & Barker 35
Australian Meat Co. 21

Beale, R., & Co. 26
Bailey, M., & Co. 46
Bailey, W. H., & Son..... 27
Barker, W., & Son .....Text 256
Barnett & Foster 11
Barrett, R. H..... 52
Barron, Harveys & Co..... 37
Bayley & Co. 41
Berdoe & Co.
Coloured Supplement
Bertie-Smith & Co..... 47
Betts & Co. 46
Bewley & Draper (Lim.) 30
Biddles, W. B..... 20
Billault, M. 38
Blair's Gout Pills 55
Blondean & Cie. 7
Bock, Oscar 47
Boehm, F..... 38
Boissy 54
Bowdlear, W. H., & Co..... 51
Bowers Bros. 6
Bradley & Bourdas 4
Bragg, J. L. 43
Brand & Co..... 17
Brathy & Hinchliffe 13
Brett, F J. .....*Supplement*
Brunner, Mond & Co. (Lim.) .. 32
Burgoyne, Burbidges & Co... 34, 47
Burroughs, James 50
Burroughs, Wellcome & Co 29, 30
Bush, J. P., Manufacturing Co. 17

Cadbury Bros. ..... *Cover*
Carter, J. H..... 53
Chalmers, W. B. 52
Chassaing & Co. .....*Text* 256
Chesebrough, The, Co. 30
Chiris, Antoine 45
City School of Chemistry and Pharmacy 4
Cocking, J. T. 27
Colthurst & Harding..... 26
Cook, E., & Co. 41
Corsan, J. R. 6
Coward, G. F., & Co. 37
Crocker, G. B.
Coloured Supplement
Cyclostyle Co., The 54

Foot of page

Do Carle & Son 14
Dee Oil Co. (Lim.) 40
Denaeyer's Peptone Co..... 19
Downie B. I. P. Co. 33
Durrant, G., & Co. 55

Eade's Pills 4
Eau du Botot 42
Edwards & Co. 41
Elliman, Sons & Co. .....*Text* 256
Ellis & Co. (Lim.) 55
Eschmann Bros. & Walsh 47
Ewen, J., & Sons..... 40
Exchange Column 8

Faust & Co. 47
Filco, E..... 4
Fiuk, F., & Co..... 54
Fitch & Co. 47
Fletcher, Fletcher & Stevenson
Text 256 54
Ford, Shapland & Co. 6
Fordham, W. B., & Sons (Lim.) 22
Fongera, E., & Co. 4
Fry & Son 17
Fuerst Bros. 38, 42

Gardner, W..... 48
Gledhill, G. H. 48
Godfrey & Cooke 27
Goodall, Backhouse & Co..... 26
Greensill, T. S., & Son 54
Guy's Tonic 47

Hamilton & Co. 4
Hargreaves, Dr., M D. 6
Hay, W. 12
Hill, A. S, & Son 33
Horn & Son 54
Hyde, Nash & Co. 55

Indian Tea Planters' Combination..... 55
Ingram, J. G., & Son..... 56
Isaacs & Co..... 48

Jackson, H. 55
Jewsbury & Brown..... 10
Jeyes' Sanitary Compounds Co. 27
Text 256
Johnson & Johnson 9
Jones & Co. 51

Kangra Valley Indian Tea Growers' Association..... 43
Kay Bros. (Lim.) 35
Keene & Ashwell 58
Kent, G. B., & Sons..... 26

Foot of page

Layng, R. C..... 54
Leath & Ross 3
Lee & Co. 55
Levasseur & Co..... 54
Levermore, A., & Co..... 54
Liquor Carnis Co. 18
Liverpool Patent Lint Co. 49
Lofthouse & Saltmer..... 33
London Homœopathic Hospital and Medical School..... 6
Lozé, A., & Co. (Lim.) 10
Lucas, C. W., & Co. 54
Lüneberger Wax Bleaching Works 55
Lynch & Co. .....*Cover* 59

Marks, H., & Sons 45
May & Baker .....*Cover* 2
May, Roberts & Co. 37
Melin, C. 53
Millar, A., & Co. 14, 43
Miscellaneous Advertisements
Coloured Supplement
Morse & Co..... 55
Mottershead & Co..... 30
Mouilla Soap Co..... 54
Mumford, G. S. .....*Text* 256
Murray, Sir James, & Son 35

Natal Drug Co. (Lim.) 38
Newhall & Mason 15
Noakes, B., & Co. .....*Text* 256

Orridge & Co. .....*Supplement*
Owen, J., Jr..... 12

Palau & Cie..... 53
Parmenter, I. W., & Co. (Lim.) 52
Peacock, M. & R. 44
Pears' Soap 31
Peterson, M., & Co..... 6
Phillips, G., & Co. 51
Potter & Clarke 16
Poulenc Frères 38

Quilliam, J., & Co. 54

Radam's, Wm., Microbe Killer Co. (Lim.)..... 33
Rankin, Wm., & Sons 48
Raphael & Co..... 4
Riddough, F. 55
Riddle, A., & Co. 54
Roberts & Co..... 38
Robinson, B..... 21
Robinson & Sons 49

Foot of page

Robinson's Family Pills..... 54
Rookledge, J. 50
Rouse & Co.
Coloured Supplement
Rowntree & Co. 43

Sainsbury, S. 54
Salvine Depôt 42
Sanders, H. G., & Son 47
Sanford & Son 54
Sanitas Company (Lim.) .. *Text* 256
Savory & Moore 19
Schacht, W., & Co. 52
Schutze, F., & Co. 49
Seabury & Johnson 26
Silicated Carbon Filter Co. *Text* 256
Silverlock, H. 6
Sinclair, Tweedie & Co..... 48
Singleton & Cole (Lim.) 44
Smith's Advertising Agency .. 47
Smith, Stephen, & Co. 51
Solport Bros. 45
Stern, G. & G. 5
Stokes, G. R., & Co. (Lim.) 48
Sutton, O., & Co..... 42

Taddy & Co..... 44
Thompson, W. P., & Co. ..*Text* 256
Toogood, W..... 57
Townsend, J. 6
Treatt, R. O..... 41
Truefitt, H. P. (Lim.) 40
Tuuhridge & Wright 50
Tully, J. ..*Coloured Supplement*
Tyrer, P. 21

Vaccine Association 40
Vogt, G., & Co. 50

Walker, Troke & Co. 50
Warner, W. R., & Co. 25
Watson & Wates..... 55
Wedgwood, J., & Sons 43
Werner & Pfleiderer 53
Willows, Francis & Butler.... 37
Woltenscroft & Co. 55
Wood, Frank 49
Wright, Layman & Umney
Text 256
Wyleys & Co. 36

Ziemer, B. W., & Co..... 42
Zimmermann, A. & M..... 39
Zuccato & Woolf..... 6

CLASSIFIED LIST OF ALL ADVERTISERS

Whose Announcements appear in "THE CHEMIST AND DRUGGIST." Those whose Names do not appear above are published in one of the other issues of this month.

AERTD & MINERAL

Apollinaris Co.
Barnett and Foster
Chemists' Aerated Waters Association.
Ellis & Son (Anthin)
Franz, Joseph, Co.
Hassall and Co. (Citric Acid Phospho)
Hay, W.
Idris and Co.
Kinmond and Co.
Jewsbury and Brown
Mills and Co. (Bourne)
Schacht, W., and Co.
Taylor, T., and F. J.
[See GINGER ALE.]

DITTO PLANT

[See SYPHONS and ESSENCES.]
Barnett and Foster
Bratby and Hinchliffe (Ld.)
Favarger and Co.
Fevre, T.
Gneret Frères
Lozé, A., & Co.
Tyler, Hayward, and Co.

ACETIC ACID

Dunn and Co.
Fuerst Bros.
Morris and Callard (Salts)

ALKALOIDS

Howards and Sons (Cinchona)
Smith, T. and H., & Co.

AMMONIA

May and Baker.
White, A., and Sons

AGENCIES ABROAD

Acard, Ed.
Australian Drug Co.
Boissy
Cooking and Co. (Japan)
Felton, Grimwade and Co. (Melbourne)
Fongera and Co. (New York)
Kempthorne, Prosser & Co. N.Z
Lennon, B. G., and Co.
Levy, Jniss
Natal Drug Co. (Limited)
Noris, Zahn and Co.
Peake, Allen and Co.
Prosser, Taylor and Co.
Roberts (Paris, &c.)
Rooke, Tompsitt and Co. (Melbourne)
Sharland and Co.
Soul. W. H., and Co.

APPARATUS

Clarke, S. (Food Warmer and Bed Tray)
French Nickel Manufacturing Co.
Orme, J., & Co. (Scientific)
Perken, Son and Rayment
Sinclair, Tweedie and Co. (Gas Jet)
Tebbutt, F.
Thompson, C. (Gas-jet)
Wedgwood & Sons (Mortars)

ARTIFICIAL EYES

Bock, Oscar

BANDAGES

Bailey, W. H., and Son
Robinson and Sons
Schutze, F., and Co.

BATH GLOVES

Solport Bros.
Thompson, Walters, Hole and Co. (Lim.)

BAKING POWDER

Goodall, Backhouse & Co.

BEESWAX

Bowdlear, W. H., and Co.
Lunsberger Wax Bleaching Works

BICARB. SODA

Brunner, Mond and Co., Lim.
Howards and Sons
May and Baker

BISMUTH, PREP.

Hearon, Squire and Francis
Hewlett and Sons
Howards and Sons
May and Baker
Symes and Co.
White, Alfred, and Sons

BLOOD MIXTURE

Lincoln and Midland Counties Drug Co.

BOTTLES

Aire and Calder Bottle Co. (Ld.)
Barnett and Foster
Barrett, R. H.
Brathy and Hinchliffe (Ld.)
Brefitt's (Lim.)
Gilbertson, H., and Sons
Hearn, E. A., and Co.
Isaacs and Co.
Kilner Bros.
Mark, J., and Co.
Pothe, H., and Co.
Shirley, A. W.
Thompson, Walters, Hole and Co. (Lim.)

BOTTLE CAPPING

Beach, J., and Sons

BOOKS

Churchill, J. and A.
Lewis, H. K.
Muter, Dr.

BOXES

Austin and Co. (Cardboard)
Ayrton & Saunders
Chalmers, W. B.
Noakes, B., and Co.
Owen, J., Jr.
Parmenter, I. W. & Co. Lim.
Robinson and Sons

BRUSHES

Dukas and Co.
Ellis & Co. (Lim.)
Fordham, W. B., and Sons, Lim.
Kent, G. B., and Sons
Moseley, David and Sons

BUTTER COLR, &c.

Clements, S. G., and Co.
Johnson and Jörgensen
Oldfield, Pattinson and Co.
Hearon, Squire, and Francis
Tomlinson & Hayward

CAMPHOR

Fuerst Bros.
Howards and Sons
Keene and Ashwell (Homœopathic)
May and Baker

CAPSULES (METALLIC)

Betts and Co.
Brooke, Peel and Co.

CAPSULES

Denonal, J. (Medicinal)
Duncan, Flockhart and Evans, Sons and Co.
Fournier, Bon and Co.
Hooper, B., and Co.

CASTOR OIL

Allen and Hanbury
Fuerst Bros.

CASCA SAGRADA

Duncan, Flockhart and Co.
Evans, Sons and Co.
Ferris and Co.
Moss, J., and Co.

CATALOGUE

May, Roberts and Co.
Saugor and Son

CEMENT

Kay Bros. (Lim.

CHALK PREPD.

Dunn and Co.
Levermore, Ang., and Co.
White, A., and Sons

CHLRIDE OF GOLD

Rowland, L.

CHLRIDE OF LIME

CHEMICALS
Andreae, Oscar and Co.
Boehm, F
Boehringer, C. F., and Sohne
Brunner, Mond and Co., Lim.
Bush, W., Son and Co.
Dunn and Co.
Fletcher Fletcher & Stevenson
Fuerst Brothers
Goodall, Backhouse and Co.
Greeff, R. W., and Co.
Hill, A. S., and Son
Hodgkinsons, Treacher and Clarke
Howards and Son (Pharm.)
Kuhn, B.
Levermore, Aug., and Co.
Lofthouse and Saltmer
Loreuz, H.
May and Baker
Morris and Callard
Moss and Co.
Poulenc, Frères
Stern, G. and G. (Pumiline)
Smith, T. and H., and Co.
White, A., and Sons
Zimmermann, A. and M.

CHEST PROTCTRS
Solport Bros.
Thompson, Walters, Hole and Co. (Limited)
Wood, Vincent

CHLORODYNE
Davenport (Browne's)
Towle, A. P., and Son

CHLOROFORM, &c.
Duncan, Flockhart and Co.
Macfarlan, J. F., and Son
Smith, T. and H., and Co.
Wright, Layman and Umney
Zimmermann, A. and M.

CITRIC ACID
Hassall & Co. (Phosphol

COCAINE-HYDRO
Boehringer, C. F., and Sohne
Howards and Sons

COCA WINE
Armbrecht, Nelson and Co.
French Hygienic Soc.

COCOA & CHOCOLTS
Cadbury Bros
Fry and Sons
Rowntree and Co.
Van Houten's Cocoa

COD-LIVER OIL
Allen and Hanburys
Burroughs, Wellcome and Co
Hill, A. S., and Son
Lofthouse and Saltmer
Oppenheimer Bros. and Co.
Smith, T. J.
Southall Bros. and Barclay
Woolley, Sons and Co.

COFFEE
Symington and Co. (Coffee Essence)

COLPSIBLE TUBES
Betts and Co.
Brooks, Peel and Co.
Sandere, H. G., & Son

COMP. MEDICINES
Allen and Hanburys
Blyton, Astley and Co.
Burroughs, Wellcome and Co
Fuerst Bros.
Hooper, B., and Co.
Leo and Co.
Wyleys and Co.

CONFECTIONERY
Blyton, Astley and Co.
Gibson, R., and Sons
Kerfoot, T.
Pascall, J.
Warrick Brothers

CONCENT. LIQS.
Evans, Sons and Co.
Fletcher, Fletcher & Stevenson

CORN CURES
Jackson, H.
Seabury & Johnson (Plasters)
Thompson, M. F.
Young, H.

COTTON WOOL
Haynes, G., & Co. (Absorbent)
Robinson and Sons (Absrbnt.)
Sanger, J., and Sons
Seabury and Johnson

CRSHD LINSEED
Mumford, G. S.

DENTIFRICES
American Toilet Co.
Eau du Botot
Fentiman & Co.
Jewsbury and Brown
Lakeman, J. J.
"Salvine"
Sutton, O., and Co.
"The Alexandra" (Ziemer)
Thompson and Capper
Warrick Bros.
Woods, W. (Areca Nut)
Wright, C., and Co.

DISINFECTANTS
Fletcher Bros. and Co.
Government Sanitary Co.
Hamilton and Co.
National Chemical Co.
Seabury and Johnson
Sanitas Co.

DISINTEGRATORS
Carter, J. H.

DRUGGISTS' SUN.
Ayrton and Saunders
Bailey, M., and Co.
Barclay and Sons (Limited)
Bertie-Smith & Co.
Davy, Humphrey, & Co.
Evans, Lescher and Webb
Evans, Sons, and Co. (Savars)
Gilbertson, H., and Sons
Hill, A. S., and Son
Hockin, Wilson and Co
Idris and Co.
Kay Bros., Lim
Lee, T. P., and Co. (Chamois)
Lynch and Co.
Mark, J., and Co.
Marriot, E., and Co.
May, Roberts and Co.
Quelch, H. C.
Rankin, W., and Sons
Sanger and Sons
Schutze and Co.
Still, W. M., and Co.
Thompson, Walters, Hole and Co. (Lim.)
Toogood, W.
Wood, Vincent

EAU DE COLOGNE
Farina, J. M.
Martin, Marla (Nun)

ELASTIC HOSIERY
Wood, V.

ELECTRIC APPAR.
Darton, F., and Co.
Gent and Co.
Orme and Co.

EMBROCATION
Elliman, Sons and Co.

ENAMEL
Fordham, W. B., and Sons (Lim.)

ENEMAS
Ingram and Son
Sanger and Son

ENGRAVERS
Barker, W., and Son
Corsan, J. R. (Glass)

ESSENCES
Beckett, W.
Boehm, F.
Bratby and Hinchliffe (Ld.)
Burgoyne, Burbidges and Co.
Bush, W. J., and Co.
Cummock, J
De Carle and Son (Fruit)
Fitzsimmons and Fearnley
Goodall, Backhouse and Co.
Hay, W.
Idris and Co.
May and Baker
Millar, A., and Co.
Oldfield, Pattinson and Co.
Stevenson and Howell
Tyrer, P. (Anchovies)
Woolley, Sons and Co

ESSENTIAL OILS
Boehm, F.
Bush, W. J., and Co.
Bush, W., Son and Co.
Clay, Dod and Co.
Cocking & Co. (Japan Peppermint)
Cummock, J.
Evans, Sons and Co.
Fitzsimmons and Fearnley
Hodgkinsons, Treacher and Clarke
May and Baker
Stevenson and Howell
Symes and Co.
Tombaret Frères
Treatt, R. C.
Warrick Brothers
Wright, Layman and Umney
Vogt, G., and Co.

ETHER
Duncan, Flockhart and Co.
Howards and Son
May and Baker
Robbins, J., and Co.
White, A., and Sons
Woolley, Sons and Co.
Wright, Layman and Umney

EXTRACTS, FLUID
Allen and Hanburys
Barber, G., and Co
Burgoyne, Burbidges and Co.
Evans, Sons and Co.
Fletcher, Fletcher & Stevenson
Hearon, Squire and Francis
Hooper, B., & Co.
Moss and Co.
Potter and Clarke
Wright, Layman and Umney

EXTRACT, MEAT
Australian Meat Co.
Bovril (Limited)
Brand and Co.
Bush, J. P. Manufacturing Co.
Denaeyer's Peptone and Extract of Meat Co (Lim.)
Liebig Co
Liquor Carnis Co. (Lim.)

EUCALYPTUS
Downie B. I. P. Co.

FILTERING
Doulton and Co.
Fordham, W. B., & Sons, Lim
Silicated Carbon Filter Co.

FEEDING BOTTLS
Breffitt, E. and Co., Lim.
Evans, Sons and Co.
Hearn, E. A., and Co.
Hockin, Wilson and Co.
Kilner Bros.
May, Roberts and Co.
Thompson, Walters, Hole and

FLY PAPERS
Ford, Shapland and Co.
Hockin, Wilson and Co.
Mather, W.
Tunbridge and Wright
Wilson, S.

FOOD (Infants' & Invalids')
Allen and Hanbury
Baelz, E., and Co.
Brand and Co.
Bragg, J. L. (Charcoal Biscuits)
Bush, J. P., Manufacturing Co.
Goodall, Backhouse and Co.
Hearon, Squire and Francis
Liebig Co.
Liquor Carnis Co. (Lim.)
Mottersnead & Co. (Benger's Food)
Nestle, H.

FORMULA
Brooks, T.

GINGER ALE
Hay, W. (Essence)
Mills, R. M., and Co.

GLUE
Deutchmann and Woronelcki
Fordham, W. B., and Sons

GLYCERINE
Fink and Co.
Fuerst Bros.
Price's Candle Co.

GRANULAR PREP.
Curtis and Co.
Hearon, Squire and Francis
Hill, A. S., and Son
Kerfoot, T.
Wright, Layman and Umney

GUM
Fink & Co. (Arabic, &c.)
Deutschmann & Woronelcki
Hyde, Nash and Co.
Levermore Aug., and Co.

HAIR PREP.
Chesebrough Mnfg. Co.
Edwards and Co.
Truefitt, H. P. (Limited)

HERB BEER EXTS
Newball and Mason
Oldfield, Pattinson and Co.
Potter and Clarke

HERBALISTS
Butler, McCulloch and Co.
Newball and Mason
Potter and Clarke

HOMŒOPATHIC
Keene and Ashwell
Leath and Rose
Thompson and Capper
Watson and Wates

HOP ALE ESSENCE
Hay, W.

HOSPITALS
London Homœopathic

HYPOPHOSPHITES
Duncan, Flockhart and Co.
Dunn and Co.
Fellowe
Fletcher, Fletcher and Co.
Symes and Co.
Tupke and King

INHALERS
Anderson and Adams
Evans Sons and Co.
Godfrey and Cooke
Hockin, Wilson and Co.
Schutze, F., and Co.
Spirone Co., The
Still, W. M., and Co.
Toogood, W.

INSECTICIDES
Hockin, Wilson and Co.
Sanford and Co.
Shorey, J. F.
Steiner and Co
Thompson, Walters, Hole and Co. (Lim.)

INK [See MARKING]
Bewley and Draper
Duncan, Flockhart and Co.

KETCHUP
Tyrer, P.

LARD
Ewen, J., and Sons

LEECHES
Fitch and Nottingham

LINT
Liverpool Lint Co.
Newsome, C.
Robinson and Sons
Seabury and Johnson

LIME JUICE
Idris and Co.
Riddle, A., and Co.

LOZENGES
Allen and Hanburys
Blyton, Astley and Co.
Gibson, R., and Sons (Manfrs.)
Hill and Son
Kerfoot, T.
Pascall, J.
Raimes and Co.
Warrick Bros.

MACHINERY
Beyer Freres.
Burroughs, Wellcome and Co.
Carter, J. H.
Goodall, E. F.
Holroyd, J., and Co. (Lim.)
McFarran, J. A.
Melin, C. (Capsuling)

MAGNESIA
Andreae, Oscar, and Co.
Bush, W., Son and Co.
Dinneford
Henry, T. and W. (Calcined)
Hill and Sons, A. S.
Kerfoot, T. (Citrate)
Murray, Sir James, and Son
Quelch, H. C.
Southwell, C., and Co. (Citrate)

MALT EXTRCT, &c.
Allen and Hanburys
Baelz, E., and Co.
Burroughs, Wellcome and Co. (Kepler's)
Hearon, Squire and Francis
Oppenheimer Bros. and Co.

MARKING INKS
Barber, G., and Co. (Crimson)
Hickleson, J.

MEDICINE CASTS
Bentley, E., and Sons
Day, Son and Hewitt (Veterinary)
Day and Sons (Veterinary)

MENTHOL
A1 Menthol Depot, A. W Shirley, Proprietor
Cocking and Co.
Hockin, Wilson and Co.
Tyrer, P.

MERCURIALS
Fuerst Brothers
Howarde and Sons
May and Baker

METHYLATED SPIRITS
Burrough, J.
Harvey, J. & W., and Co.
Jones and Co.
Phillips, G., and Co.

METHYLENE
Robbins, J., and Co

MICROSCOPES
Darton, F., and Co.
Perken, Son and Rayment

MILK
Nestle, H. (Condensed)

MIXING MACHINERY
Carter, J. H.
Gardner, W.
Werner and Pfleiderer

MORPHIA
Macfarlan, J. F., and Co.
Smith, T. and H.

MUSK
Chirie, Antoine

OILS, PAINTS, &c.
Anglo-American Oil Co. (Lim.)
Colthurst and Harding
Fox, W., and Sons

OINTMENT BASES
Burroughs, Wellcome and Co.
Chesebrough (Vaseline)
Filce, E.
Grindley & Co. (Petroleum Jelly)

OPHTHALMIC
Pomlee, Dr.

OPTICIANS
Darton, F., and Co.
Perken, Son and Rayment
Raphael and Co.

OTTO OF ROSE
Fuerst Bros.
Treatt, R. C.

PAPAIN PINKLES
Kuhn, B.

PARALDEHYDE
Zimmermann, A. and M.

PATENT AGENTS
Hora and Son
Thompson, W. P., & Co.

PEPPERMINT OIL
Cocking and Co.

PEPSINE, &c.
Burroughs, Wellcome and Co.
Chassaing and Co.
Fletcher, Fletcher & Stevenson
Newbery F. & Sons (Inglovin)
Warner and Co. (Inglovin)

PATENT MEDCNS
Armbrecht, Nelson and Co.
Atkinson and Barber (Infant Preserv)
Barclay and Sons (Limited
Beecham, T. (Pills)
Edwards and Son
Evans, Lescher and Webb
Fenning's (Powders)
Filco, E.
Globe Chemical Co.
Goodall, Backhouse and Co.
Grosgurin, C.
Guy's Tonic
Holloway (Pills and Oint.)
Hop Bitters Co. (Lim.)
Indian Tea Planters' Combination
Invigorine Manufacturing Co.
John's Liver Pills
Lalor (Phosphodyne, &c.)
Lincoln (Clarke's Mix.)
May, Roberts and Co.
Newbery and Sons
Powell, A. E., and Co.
Radam's Microbe Killer Co. (Lim.)
Roberts and Co. (Foreign)
Scrubb (Limited)

PATENT MEDCNS (Cont.)
Thompson, Walters, Hole and Co. (Lim.)
Vogeler, The C. A. Co.
Wilson, A. (Hunter's Nervine)
Wilson, J. (Anti-Stiff)

PERFUMERY, FANCY SOAPS
Bayley and Co.
Blondeau and Cie
Boehm, F
Burroughs, Wellcome and Co.
Chesebrough Manufctring Co.
Chiswick Soap Co.
Cook, E., & Co.
Coward and Co.
Dee Oil Co. (Limited)
Deutschmann and Woronelcki
Durrant, Geo.
Ewen (Soaps)
Farina, J. M.
Giraud Fils
Greensill, T. S., and Son
Mann, C. A., and Co.
Moulila Liquid Soap Co., Lim.
Newbery and Sons (Bordosa')
Osborne, Bauer & Cheeseman
Pears' Soap
Price's Patent Candle Co.
Rosmarine Manufg. Co.
Rouse & Co.
Sainsbury, S. (Lav. Water
Shirley, A. W
Thompson, Walters, Hole and Co. (Lim.)
Treatt, R. C.
Truefitt, H. P. (Limited)
Vogt, G., and Co.
Warrick Brothers
West, T. (Okell's Mona)
Woolley, Sons & Co. (Powder)

PEROX. OF HYDR
Dunn and Co.
Robbins and Co.

PETROLEUM
Anglo-American Oil Co. (Lim.)
Dee Oil Co. (Limited) (Jelly)
Grindley and Co. (Jelly)
Hamilton and Co. (Jelly)
Snowdon, Sons and Co.

PHOTOGRAPHIC
Botwright and Grey
Darton, F., and Co.
Howarde and Son (Chemicals)
Marion and Co.
Orme, J., and Co.
Perken, Son and Rayment
White, Alfred, and Sons

PINE PRODUCTS
Burroughs, Wellcome and Co
Godfrey and Cooke
Stern, G. and G.

PILL MACHINES
Niblett, G. W.
Paisu, N., and Co.
Findar, J. W.
Toogood, W. (Coater)

PORCELAIN GOODS
Toogood, (E.c. Pots, regist.)

PILLS (Coated, &c.)
Allen and Hanburys
Anderston Apothecaries Hall
Beecham, Thomas
Blair's Gout Pills
Eade's Gout Pills
Evans, Sons and Co.
Frere, L.
Hill, A. S., and Son
Holloway's
Hooper's
Hearon, Squire, and Francis
McKesson and Robbins
Newbery and Sons
Robinson's
Warner, W. R. & Co. (Coated)
Wyleys and Co.

PODOPHYLLIN, &c.
Keith, B., and Co
Smith, T. and H., and Co.

PLASTERS
Evans, Sons and Co.
Johnson and Johnson
Mather, W.
Quilliam, J., and Co.
St. Dalmas, A. De
Seabury and Johnson
Thompson, M. F
Young, H.

POLISHING
Bradley & Bourdas (Albarum)
Fordham, W. B., and Sons (Limited)
Oakey, John, and Sons

PRINTING
Bowers Bros.
Corsan, J. R. (Glass)
Cyclostyle Co.
Ford, Shapland and Co.
Silverlock, H.
Townsend, J.
Zuccato and Woolf.

PUMILINE
Stern, G. and G.

QUININE SALTS
Andreae, Oscar, and Co.
Boehringer, C. F., and Sohne
Howards and Sons
Kuhn, B.
Rivers, Hicks (Penny Quinine

PHARM. PREPS.
Allen and Hanburys
Barron, Squire and Co.
Bertie-Smith and Co.
Bilbeh
Boehm, F.
Brady and Martin
Burroughs, Burbidges & Co.
Burroughs, Wellcome & Co
Chassaing and Co.
Dee Oil Co. (Limited)
Deutschmann & Woronsickl
Duncan, Flockhart and Co.
Fellows
Ferris and Co.
Fletcher, Fletcher and Co.
Fournier, Bon and Cie
Fruneau, E.
Giles Schacht & Co.
Greeff, R., W., and Co.
Green, C., and Co.
Hearon, Squire and Francis
Hewlett and Son
Hill, A. S., and Son
Hooper, B., and Co.
Howards and Sons
Jeyes Sanitary Compounds Co
Keith & Co. (Conc. Tinctures
Lorenz, H.
Martindale, W.
May and Baker
Morson, T., and Son
Potter and Clarke
Rankin and Borland
Risqles and Co.
Roberts and Co
Salvolino, The, Co.
Southall Bros. and Barclay
Sutton, W., and Co.
Symes and Co.
Trommsdorff, H.
White, Alfred, and Sons
Willows, Francis and Butler
Woolley, Sons and Co.
Wylsys and Co.

RENNET
Clements, S. G., and Co.
Duncan, Flockhart and Co
Johnsen and Jörgensen
Oldfield, Pattinson and Co.

SACCHARIN
Allen and Hanburys
Burroughs, Wellcome and Co.

SALICYLIC ACID
Fnerst Bros. (Kolbe's)
Morson, T., and Son
Zimmerman, A. and M.

SALT
Stern, G. & G. (Papsalin)

SALICIN
Macfarlan and Co.
Smith, T. and H., and Co

SALOL
Kuhn, B.

SAUCES, PICKLES
Goodall, Backhouse and Co.
Tyrer, P.

SEALING WAX
Stewart, G., and Co.

SCHOOLS, &c.
City School of Chemistry and Pharmacy (Lim.)
Liverpool School of Pharmacy
London Homœopathic and Medical School
London Hospital and Medical School
Manchester College
Owens College
Royal (Dick's) Vetry. College
South London School of Pharmacy, Lim.
The School of Pharmacy
University of Glasgow
Westminster College

SELTZOGENES
Brathy and Hinchliffe, (Ld.)
Durafort
Evans, Sons and Co.
Fevre, T.
Geraut, E. and Co.
Lynch and Co.
May, Roberts and Co
Thompson, Walters, Hole and Co. (Limited)

SHEEP DIP
Fletcher Bros. and Co.
Hamilton and Co.
Wilkin's

SHOP FITTERS
Bowling and Goyier
Bygrave, J. and W
Evans, Sons and Co.
Howlett, S.
Natali, E. (Show Cases)
Poths, H., and Co.
Treble, G., and Co.
Yates, W. S.

SOAP
Ayrton and Saunders
Bayley and Co.
Blondeau and Co. (Vinolia)
Obiswick Soap Co.
Cook, E., and Co.
Ewen, J., and Sons
Fordham, W. B., & Sons (Ld.)
Lucas and Co.
Pears' Soap
Stern, G. and G.

SPONGE
Cresswell Bros.
Marks, H., and Sons (Ld.)
Peterson, M., and Co.

SPECTACLES
Botwright and Gray
Darton, F., and Co.
Perken, Son and Rayment
Raphael and Co.

SPIRIT
Burrough, J. (Pure & Methyl.)
Harvey, J. and W., and Co.
Jones and Co. (Methyl.)
Macnair, A., and Co.
Phillips and Co.
Smith, Stephen and Co.

STAMPS (RUBBER)
Hickisson, J.
Pollard, A. W.

STARCH
Beckett, S.
Crittenden (Gloss)

STOPPERS
Austin and Co. (Sprinklers)
Barnett and Foster
Sanders, H. G., and Son

STOVES
Clark, S., and Co. (Lim.)

SUGAR
Gibson, R., and Sons

SURGICAL
Ayrton and Saunders
Bailey, W. H., and Son
Barclay and Sons (Limited)
Cocking, J. T.
De Luca, G. V.
Eschmann Bros. and Walsh
Haywood, J. H.
Ingram and Son
Liverpool Patent Lint Co.
Mestivier and Co.
Robinson and Sons
Schutze, F., and Co.
Schoenfeld Frères
Still, W. M., and Co.
Thompson, Walters, Hole and Co. (Limited)
Wood, F.
Wood, Vincent

SULFONAL
Burroughs, Wellcome and Co.
May and Baker

SYPHONS
Barnett and Foster
Brathy and Hinchliffe (Ld.)
Durafort
Favarger and Co.
Fevre, T.
Geraut, E., and Co.
Kilner Bros.

SYRINGES
De Luca, G. V.
Schoenfeld Frères

SYRUPS
Fletcher, Fletcher (Liquors)
Idris and Co.

TILL
Gledhill, G. H.
Stokes, G. R. & Co.

TEA
Franch and Langdale
Gt. Tower St. Tea Co.
Walker and Dalrymple

THERMOMETERS
Bailey, W. H., and Son
Darton, F., and Co.
Perken Son and Rayment

TINS
Noakes, B., and Co.

TOBACCO, CIGARS CIGARETTES
Lynch and Co.
Peacock, M., & R.
Singleton and Cole (Lim.)
Teddy and Co.

TOILET
Evans, Sons and Co.
Fordham, W. B., and Sons (Lim.)
Fowler, E.
Layng, R. C.
Morse and Co. (Ivorine)
Mumford, G. S.
Quelch, H. C.
Salvolino, The, Co.
Truenit, R. (Limited)
Woolley, Sons and Co.

TOOTH PASTE
American Toilet Co.
Jewsbury and Brown
Sutton, O., and Co. (Block)
Wilson, A. (Bunter's)
Woods, M. (Arsea)

TRADE MARKS
Horn and Son

TYPE-WRITING
Pollard, A. W.

TRUSSES
Bailey, W. H., and Son
Haywood, J. H.
Mather and Co.
Thompson, Walters, Hole and Co. (Lim.)
Wood, F.
Wood, V.

URETHANE
Howards and Sons

VACCINATION
Vaccine Association (Lymph)

VALUERS AND TRNSFR. AGNTS
Bardoe & Co.
Brett, F. J.
Crocker, G. B.
Orridge and Co.

VASELINE
Chesebrough Manufacturing Co

VERMIN KILLERS
Sanford and Son
Steiner and Co.

VINOLIA (Superfatted Medical and Toilet)
Blondeau and Co.

VETERINARY
Bigg, T.
Day and Sons
Day, Son and Hewitt
Down, H., and Co.
Evans, Lescher and Webb
Elliman, Sons and Co.
James, W. H. (Blisters)
Rookledge, J.
Spratts (Dogs)
Sutton, F., and Co.
Wyleys and Co.

WHOLESALE AND EXPRT DRGGSTS
Allen and Hanburys
Barron, Harveys and Co.
Bertie-Smith & Co.
Burgoyne, Burbidges and Co.
Bush, W., Son and Co.
Bush, W., and Co.
Clay, Dod and Co.
Coward, G. F., and Co.
Davy, Humphrey, and Co.
Evans, Sons and Co.
Evans, Lescher and Webb
Evans and Sons (Limited)
Ferris and Co.
Fox, W., and Sons
Goodall, Backhouse and Co.
Harker, Stagg and Morgan
Hearon, Squire and Francis
Hewlett and Son
Hill, A. S., and Son
Hodgkinsons, Treacher Clarke
Lofthouse and Saltmer
Macfarlan, J. F., and Co.
Oldfield, Pattison and Co.
Potter & Clarks
Symes and Co
Thiermann, H., Jun.
Thompson and Capper
Thompson, Walters, Hole and Co. (Limited)
Walker, Troke and Co.
Willows, Francis, and Butler
Woolley, Jas., Sons and Co.
Wright, Layman and Umney
Wylsys and Co.

WINES, SPIRITS
Coleman and Co. (Meat and
Durrant, G. (Orange) Malt.
Goodall, Backhouse and Co.
Idris & Co.
Millar, A., and Co
Robinson, B.

SMALL SUGAR-COATED PILLS

Unequalled in their medicinal properties or in SOLUBILITY, the best ingredients being invariably employed.

PREPARED BY

WM. R. WARNER & CO.

Suitable for Retail Sale, in screw-capped Pill Tubes. Not liable to Stamp Duty unless specially recommended or sold as "Proprietary."

No. 142. Gran. Cath. Comp. (Little Cathartic Granules). Aloin, 1-10 gr.; Podophyllin, 1-5 gr.; Ext. Hyoscy., 1-20 gr.; Jalapin, 1-10 gr.; Ext. Nuc. Vom., 1-20 gr.; Ol. Res. Capsici, 1-20 gr. Dose 1 to 4.	Per 1,000, in Plain Bottle, 4/-.	Per Small Stoppered Vase, with painted glass label, 5/6.	Per Stoppered Vase, with painted glass label. (5,000.) 21/-.

An "all-round" Antibilious Pill, which has found favour wherever introduced, is "No. 120" ("Pil. Cathartic and Liver").

No. 120. Pil. Cathartic and Liver. ℞ Podophyllin, ¼ gr.; Ext. Colocynth, ½ gr.; Pv. Soc. Aloes, 1 gr.; Pv. Scammony, ¼ gr.; Pv. Saponis, 1-8 gr.; Ext. Hyoscyami, 1-8 gr.; Gingerine, 1-8 gr. Dose, 2 to 4 pills as a purgative, 1 to 2 pills as an aperient.	Per 1,000, in Plain Bottle, 4/-.	Per Stoppered Vase, with painted glass label, 6/4.	Per Bottle (Bulk) of 5 000, 18/9.

DEPOT:—F. NEWBERY & SONS,

1 & 2 KING EDWARD STREET, NEWGATE STREET, LONDON, E.C.

EIGHT PRIZE MEDALS AWARDED

GOODALL'S HOUSEHOLD SPECIALITIES.

YORKSHIRE RELISH.

Most Delicious Sauce in the World. Bottles, 6d., 1s., and 2s. each

GOODALL'S BAKING POWDER.

The Best in the World. 1d. Packets; 6d., 1s., 2s. and 5s. Tins.

GOODALL'S EGG POWDER.

One 6d. Tin is equal to 25 eggs. In 1d. Packets; 6d., 1s. 2s. and 5s. Tins.

GOODALL'S CUSTARD POWDER.

Delicious Custards without Eggs. In Boxes, 2a. 6d., and 1s. each

GOODALL'S BLANCMANGE POWDER

Delicious Blancmange in a Few Minutes. Boxes, 6d. and 1s. each.

GOODALL'S QUININE WINE, B.P.

Best Tonic yet Introduced. Bottles, 6d., 1s. and 2s. each.

GOODALL'S GINGER-BEER POWDER.

Makes the Best Ginger-Beer. Packets, 3d. nd 6d.

GOODALL'S BRUNSWICK BLACK.

For Painting Stoves, Grates, Iron, Tin, &c. 6d. and 1s. Bottles

GOODALL'S LAVENDER WATER.

A Rich and Lasting Perfume. Bottles, 1s., 2s., and 5s. each.

GOODALL'S PLATE POWDER.

For Polishing and Cleaning all Metals. Boxes, 6d., 1s. and 2s.

GOODALL'S JELLY SQUARES.

Make a Delicious and Nutritious Jelly. In ½-pint, 1-pint, and Quart boxes, 3d., 6d., and 1s. each.

PROPRIETORS—GOODALL, BACKHOUSE & CO., LEEDS

PATENT MEDICINES AND DRUGGISTS' SUNDRIES.

Monthly Price List of Patent Medicines, Druggists' Sundries, &c., will be sent post free on application to

GOODALL, BACKHOUSE & CO., LEEDS.

26

LOEFLUND'S

MALT AND STERILIZED MILK PRODUCTS

LANCET.—"We have nothing but praise to bestow."

BRITISH MEDICAL JOURNAL.—"Pure Hordeum possesses all the properties claimed for it."

CHEMIST AND DRUGGIST.—"Pure Hordeum may be relied on to contain the highest attainable proportion of diastase."

KINDERMILCH } Infant
ALPINE MILK RUSKS (ground) } foods.
CREAM MILK, unsweetened, sterilized.
CREMOR HORDEATUS, delicious substitute for Cod-liver Oil.
PURE HORDEUM (Malt Extract); also with Cod-liver Oil, Hops, Iron, Lime, Quinine, and Pepsine.
MALT EXTRACT LOZENGES.
MUSTARD LEAVES, best and cheapest.

Sole Agents—ROBERT BAELZ & CO., 14–20 St. Mary Axe, E.C.

G. B. KENT & SONS

Have been awarded the ONLY

A.D. 1777.

GOLD MEDAL

At the Paris Exhibition, 1889, for

ENGLISH BRUSHES

See Advt. pp. 189–192, *The Chemist and Druggist*, July 26th, 1890.

SEABURY'S MUSTARD PLASTERS

ARE THE BEST.

On cloth	100	10	6	3 leaves; ½	1	5-yard rolls
	84/	10/	6/	3/ 7/	10/	84/ per doz.
				6 in.	6 in.	12. in wide
On paper	100	50		10 leaves;	1 yard	5-yard rolls
	60/	30/		7/	7/	60/ per doz.
					6 in.	12 in. wide

SEABURY'S Half-strength Mustard Plasters on Paper, 10 leaves in box, 7/ per dozen boxes.

These Plasters are intended to meet the wants of persons of specially sensitive skins, who cannot endure the activity of full strength.

SUBJECT TO DISCOUNT. [1]

SEABURY & JOHNSON,

46 JEWIN STREET, LONDON, E.C.

NEW YORK AND HAMBURG.

COLTHURST & HARDING,

BALL DENOTES COLOUR OF PAINT.

BRISTOL—Manufactories: Phœnix Wharf and Temple Gate. Offices: Temple Gate. Telegrams: "Phœnix Bristol."

LONDON—Manufactory: Alpha Works, Millwall E. City Office: 16 Fish Street Hill, E.C. Telegrams: "Alpha Brand London."

HARD LUSTROUS ENAMEL,

IN ALL THE ART SHADES.

For all kinds of decoration on Wood or Iron. Dry with a surface like Porcelain. Sold in small or large Tins, or in bulk. Prices and shades on application.

WHITE LEAD, ZINC WHITE, PAINTS & COLOURS OF ALL KINDS.

MIXED PAINTS READY FOR USE,

In Tins, 1, 2, 4, 7, and 14 lbs. each.

HIGH-CLASS VARNISHES

Of all kinds, for Coachbuilders, Decorators, &c.

OIL BOILERS, REFINERS, & MERCHANTS

Export Orders receive special and prompt attention.

CHOLERA!

The best preventative against

CHOLERA

is

Dr. v. Esmarch found, in PROF. KOCH'S LABORATORY, that Creolin, 1 per mille, killed the Cholera Bacillus in 10 minutes, whereas Carbolic Acid took 4 days.

Dr. Eisenberg's researches proved that the Cholera Bacillus cannot live in Jeyes' Fluid.

JEYES' CREOLIN

JEYES' FLUID

Should be recommended by the Chemist as a Disinfectant against

CHOLERA.

SAMPLES, MEDICAL PAMPHLETS, PRESCRIPTION FORMULARY, FREE ON REQUEST.

Jeyes' Sanitary Compounds Co., Ld., 43 Cannon St., London, E.C.

TRUSSES.

THE BEST FOR SHAPE AND QUALITY. FIRST PRIZE, 1879.

MANUFACTURED THROUGHOUT ON THE PREMISES.

GREAT FACILITIES FOR MANUFACTURE AND QUICK DESPATCH OF SPECIAL TRUSSES.

BAILEY'S TRUSSES FOR SCROTAL HERNIA.

BAILEY'S INDIARUBBER TRUSSES FOR INFANTS.

MANUFACTURERS and DEALERS in all kinds of SURGICAL APPLIANCES, WHOLESALE and for EXPORT

Shippers and the Wholesale Trade Supplied on Best Terms and Lowest Prices.

W. H. BAILEY & SON, 38 Oxford St., LONDON

ILLUSTRATED CATALOGUE AND TERMS ON APPLICATION.

BY ROYAL LETTERS PATENT, NO. 16,713.—DECEMBER 20, 1886.

GODFREY'S
CHLORIDE of AMMONIUM INHALER

Catarrhal Throat and Ear Affections, Loss of Voice, Bronchial Asthma, and Hay Fever.

The SIMPLEST FORM of INHALER.

VERY PORTABLE. CONTAINS NO WATER.

Silver Medal, Brussels Exhibition, 1888. Yields a plentiful cloud of Neutra Vapour, with little or no effort on the part of the patient.

SHIPPERS & LARGE BUYERS SUPPLIED ON LIBERAL TERMS.

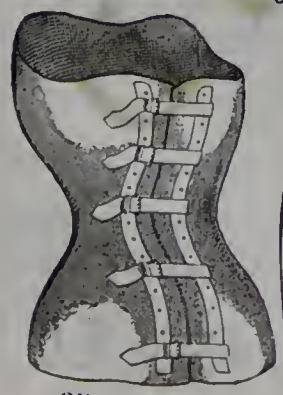
PRICE 7s. 6d. RETAIL.

May be obtained through S. MAW, SON & THOMPSON, London.

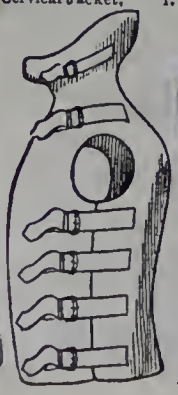
Illustrated Prospectus, with the "History of Chloride of Ammonium as a Remedial Agent," free by post. SOLE MAKERS—

GODFREY & COOKE, 30 Conduit Street, Bond Street, LONDON, W.

COCKING'S ADAPTABLE PORO-PLASTIC JACKETS AND SPLINTS. Patentee and Sole Manufacturer, J. T. COCKING, PLYMOUTH.



Cervical Jacket.



1. Cervical Jacket, No. 3.

INSTRUCTIONS FOR MEASUREMENT.

JACKET
(in cases of slight deformity)

Circumference at axilla.
" waist.
" hips.
Length from axilla to great trochanter.

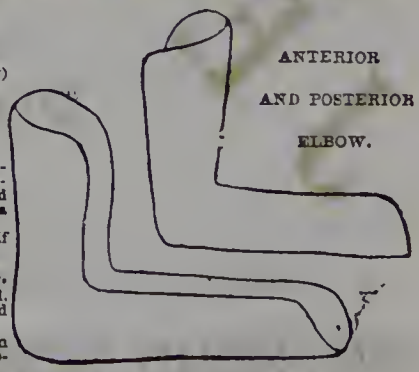
In severe angular cases circumference over apex of curve, position of ditto, and contour should be given; in lateral cases a description of the case.

In all cases it must be stated if for male or female.

CERVICAL JACKETS.

Same measurements required, and circumference at neck, and length from neck to axilla.

Any part of the Jacket can in the process of manufacture be left soft.



ANTERIOR AND POSTERIOR ELBOW.

A FULL LIST OF SPLINTS AND PORO-PLASTIC IN SHEETS MAY BE HAD ON APPLICATION

28

Digestive Enzymes.

LONDON.] AUGUST 23. [1890.

ZYMINE (FAIRCHILD).

Zymine is rightly considered as one of the greatest advances in modern medicine. It affords a natural and most efficacious means for the treatment of intestinal dyspepsia. It is our only therapeutic resource in many forms of indigestion and in occlusion of the pancreatic duct, &c. It is our only means of pre-digesting all kinds of foods, administering them fresh and palatable, and in such form that they will not prove a burden upon digestion. It is the only agent which does for the digestive organs what they are unable to do for themselves. It has revolutionised infant dietetics, inasmuch as its addition to cows' milk renders that fluid as easily digested as mothers' milk in every particular, after the lapse of twenty minutes.

Zymine contains no diluent, such as starch or milk sugar, which additions do not in the least assist its digestive action and are added simply to increase the *bulk and profit.* Zymine must not be confounded with commercial Pancreatin—the latter is more expensive and less active.

ZYMINE PEPTONISING POWDERS.

These are so called because they produce *peptones.* Whenever it is proposed to peptonise milk only, and that continuously, the Zymine Peptonising Powders (Fairchild)* will be found the most convenient form to use, for obvious reasons. They insure accuracy, security from deterioration, and extreme convenience. For patients away from home, travelling, or visiting, these advantages will be specially appreciated. In those cases, however, where strict economy is a matter of considerable moment, the plain Zymine can be used.

Zymine (Fairchild) is supplied in three forms :—

1. In Powder, put up in ¼-oz. and 1-oz. bottles.

2. (*a*) In 3-grain Tabloids, put up in bottles of 25 and 100.

(*b*) In Compound Tabloids (of 25 or 100 in a bottle), each containing Zymine, 2 grains; Bismuth Subnitrate, 3 grains; Powdered Ipecac., 1/10 grain.

Dose.—One or two, an hour or so after eating.

3. In Zymine Peptonising Powders in glass tubes, a dozen in a box, each tube containing 5 grains of Zymine and 15 grains of Soda Bicarb., sufficing to predigest a pint of milk or beef tea.

A complete list of recipes for the preparation of peptonised foods is supplied with each box of the powders.

* Beware of imitations of these Peptonising Powders. Always see that the name FAIRCHILD is on the package. Substances of an entirely different character are being sold in the market under the name of Peptonising Powders.

Zymine (Ext. Pancreatis) Fairchild, supplied to the Trade in ¼-oz. and 1-oz. bottles, at 20*s.* and 60*s.* per doz.

Zymine and Zymine Comp. Tabloids supplied to the Trade in bottles of 25 and 100, at 18*s.* and 48*s.* per doz. Retail 2*s.* and 5*s.* each.

Zymine Peptonising Powders (Fairchild) supplied to the Trade in boxes containing 1 doz. tubes, at 18*s.* per doz. boxes. Retail, 2*s.* per box.

PEPSIN (FAIRCHILD)

In Scales or Powder.

Possesses the highest standard of activity and permanency.

Numbers of physicians have been disappointed in the action of some commercial pepsins. Dr. Corvisart, of Paris, first suggested the employment of the gastric digestive enzyme in enfeebled digestion, and doubtless, as originally prepared, pepsin was found to be of much benefit as an aid to digestion. The immense demand subsequently for pepsin led to the adoption of varying processes for the preparation of the drug. Numbers of these were found faulty; some were evaporated down at high temperature and thus destroyed; others who succeeded in obtaining a comparatively active pepsin were tempted to employ various *diluents,* notably, amongst others, starch and milk sugar. The Pepsin prepared by the Fairchild process possesses ten times the proteolytic power of commercial pepsins when subjected to the Pharmacopœia test, *i.e.,* one grain will digest 1,000 grains of coagulated albumen instead of 100 grains only. *Those pharmacists anxious to obtain a pepsine of the greatest activity for the preparation of wine, elixir, or solution should order the Fairchild's Pepsin in scales or powder. It is 10 times as powerful a digestive agent, and is not more expensive, than ordinary commercial pepsins.*

Dr. Burney Yeo says, "Pepsin is largely given to promote the activity of the stomach itself. For this purpose many preparations exist, *but some are very uncertain and many probably quite inert.*"

"Pepsin (Fairchild) excels all other preparations of Pepsin with which we are acquainted."—*Edinburgh Medical Journal.*

Pepsin, either in scales or powder, may be given spread on bread-and-butter or in the convenient form of sugar-coated Tabloids; each Tabloid contains one grain of pepsin with the appropriate quantity of acid and aromatics.

Supplied to the Trade in bottles containing 25 and 100 Tabloids at 14*s.* and 42*s.* per dozen.

Pepsin in Scales or Powder supplied to the Trade in ¼-oz. and 1-oz. bottles at 20*s.* and 60*s.* per dozen.

BURROUGHS, WELLCOME & CO., Snow Hill Buildings, London, E.C.

Above Prices subject to usual Discount.

"VASELINE," in 1d., 2d., & 3d. TINS.

All nicely wrapped, and stamped with the name of

THE CHESEBROUGH MANUFACTURING CO., the Proprietors and Sole Manufacturers.

NONE OTHER GENUINE.

1d. Tins, One Gross in Wood Box at	8/-,	Five Gross assorted,	7/2 per Gross net.		*Of all Wholesale Houses, or Sample Boxes Carriage paid on receipt of Postal Order.*
2d. Tins, One ,, ,,	16/-	,,	14/-	,,	
3d. Tins, Half ,, ,,	24/-	,,	21/-	,,	

CAUTION.—The fancy word "VASELINE" is the Registered Mark, and is the exclusive property of this Company, and indicates *THEIR* make and putting up of *THEIR* preparations of Petroleum Jelly.

SHOW CARDS AND CIRCULARS ON APPLICATION.

42 Holborn Viaduct, London, E.C.

STROPHANTHUS

(AFRICAN ARROW POISON).

Strophanthus hispidus seed.

The value of this as a diuretic and cardiac tonic has been fully confirmed since its introduction to the profession by us. Most unfortunately, several useless substitutes have been recently introduced into the London Drug Market, notable amongst others, the *Holarrhena antidysenterica*; still there appears to be an adequate supply of the true *Strophanthus hispidus* seeds. The desirability of supplying a *standardized* preparation of such a toxic drug as *Strophanthus* is understood by most pharmacists. The Tinct. Strophanthi (B., W. & Co.) is prepared from the seeds originally experimented with by Professor Fraser, and is of standardized strength 1 in 20. The preparations usually prescribed are this Tincture, and the Tabloids, each containing two minims of the Tincture.

Strophanthus Tincture (B., W. & Co.) supplied to the Trade in ½-oz. and 1-oz. bottles, at 4*s.* and 6*s.* per doz.; 1-lb. bottles, 6*s.* each. Tabloids (containing two minims of Tincture in each) are the safest and most convenient form for administration. Bottles of 100, at 16*s.* per doz. *Above prices subject to usual Discount.*

BURROUGHS, WELLCOME & CO., Snow Hill Buildings, LONDON, E.C.

DRAPER'S INK (DICHROIC)

THE NEW BLACK INK, different from anything else ever produced.

Writing becomes a pleasure when this Ink is used. It has been adopted by the principal Banks, Public Offices, and Railway Companies throughout Ireland.

It writes almost instantly full black.
Does not corrode Steel Pens.
Dries rapidly on the Paper.
Is cleanly to use, and not liable to blot.
Flows easily from the Pen.
Blotting-paper may be applied at the moment of writing.

In Jars, 6d., 1s., and 2s. each.

Can be obtained, in London, through Messrs. Barclay & Sons, Farringdon Street; W. Edwards & Son, 157 Queen Victoria Street, E.C. F. Newbery & Son, Newgate Street; S. Maw, Son & Thompson, Aldersgate Street; Hayden & Co., 10 Warwick Square, Paternoster Row; Hovenden & Sons, City Road; Ayrton & Saunders, Duke Street, Liverpool; Goodall, Backhouse & Co., Leeds; Jno. Heywood, John Dalton Street, Manchester; James Hemington, 6 Moor Street, Birmingham; Henry Hodder, Broad Street, Bristol

BEWLEY & DRAPER (Limited), DUBLIN.

See "CHEMIST AND DRUGGIST," December 15th, 1874.

BENGER'S PREPARATIONS

GOLD MEDAL AWARDED, HEALTH EXHIBITION, LONDON.

"Mr. Benger's admirable Preparations."—LANCET.

LIQUOR PANCREATICUS (BENGER).
For preparing peptonised or partially digested milk, soups &c. Bottles, 2/6, 4/6, and 8/6, with full directions.

BENGER'S PEPTONISING POWDERS.
Colourless, odourless, and soluble. One will peptonise a pint of milk, &c., in 10 to 15 minutes. Boxes of 12 powders, 2/6.

LIQUOR PEPTICUS (BENGER).
An exceedingly active fluid pepsin. Dose, one to two teaspoonfuls with meals. Bottles, 3/, 5/6 and 10/6.

BENGER'S PEPTONISED BEEF JELLY.
A delicious quick restorative; will keep in any climate. In Glass Jars, Retail 2/.

BENGER'S PEPTONISED CHICKEN JELLY.
A nutritive delicacy for Invalids. In Glass Jars, Retail 2/.

BENGER'S FOOD (Pancreatised).
For Infants, Children, and Invalids. This delicious and highly nutritive food is distinguished from others by the ease with which it can be digested and absorbed. Tins, 1/6, 2/6, 5/, and 10/.

BENGER'S NEW ESSENCE OF RENNET.
For making pure whey, junkets, &c. Bottles, 1/ each.

BENGER'S PREPARATIONS are obtainable through all leading Wholesale Houses or of the Manufacturers,

MOTTERSHEAD & CO. (S. PAINE & F. B. BENGER), PHARMACEUTICAL CHEMISTS, MANCHESTER

THE CHEMIST AND DRUGGIST

ESTABLISHED 1859.

PRINCIPAL OFFICE, 42 CANNON STREET, LONDON, E.C.

BRANCH OFFICES:

MELBOURNE, SYDNEY, AND NEW YORK.

Published every Saturday.

Subscription 10s. per year, payable in advance; dating from the commencement of any month.

Supplied only to persons connected with the Trade.

Post free to every country in the world. Single copies 4*d.* each.

Cheques or Postal Orders should be payable to EDWARD HALSE, and crossed MARTIN & CO.

Supplied regularly to every member of the following Societies, who have adopted THE CHEMIST AND DRUGGIST as their official organ.

The Pharmaceutical Association of New Zealand.

The Pharmaceutical Society of Queensland.

The Pharmaceutical Society of South Australia.

The Hobart Chemists' Association.

The Launceston Pharmaceutical Association.

South African Pharmaceutical Association.

For Australasian subscribers the subsidiary journal, THE CHEMIST AND DRUGGIST OF AUSTRALASIA, is included.

Literary Contents.

	PAGE
At the Counter	262
Bankruptcy Report	246
Before and After	247
Commentary	259
Consuls' Reports	264
Correspondence:—	
Registration of Chemists and Druggists; Dispensing Charges; Juries; Doctor *v.* Chemist	259
The Treatment of Obesity; B.P. Syntax; Drugs for the Army	270
Miscellaneous Inquiries	271
Information Supplied	272
Deaths	247
Editorial Notes:—	
The Session of 1890	256
Conference Subjects	257
The Spirit Tax	258
French Pharmaceutical News	244
Gazette	247
General News	243
German Pharmacopœia	250
International Medical Congress	248
Irish Pharmacy Act Amendment Act (by J. E. Brunker, M.A.)	260
Legal Reports	246
Marriage	247
Menstrua for Tinctures	251
Medical Gleanings	252
Metropolitan Reports	242
Personalities	262
Pharmacy Act (Ireland) Amendment Act	253
Practical Notes	263
Provincial Reports	242
Railway Traffic Rates	245
Trade marks Applied for	247
Trade Notes	231
Trade Report	265
Wills of Deceased Chemists	249

BOOKS FOR EVERY CHEMIST.

WE publish three books which every chemist and druggist who has a wholesome regard for his personal and business interests should not fail to secure. They deal with the analytical, legal, and practical departments of pharmacy. The *analytical* is covered by Mr. B. S. Proctor's "Manual of Pharmaceutical Testing" (2*s.* 6*d.*, post free 2*s.* 9*d*), which contains easily applied tests for all pharmacopœial chemicals, none of which require the resources of a chemical laboratory—simply the measures, &c., used at the dispensing-counter. The *legal* side is dealt with by Mr. Alpe, of Somerset House, in his interesting "Handy-book of Medicine Stamp Duty," price 2*s.* 6*d.* or by post 2*s.* 9*d.* The *practical* section of pharmacy, viz. dispensing, is very well looked after in "The Art of Dispensing," which is one of the most popular books in English pharmaceutical literature. It is published at 3*s.* 6*d.* and is sent by post for 3*s.* 10*d.* Nearly all the wholesale houses stock these books and supply them at the published prices.

MANUAL OF PHARMACEUTICAL TESTING.

THIS handy little volume contains an amplification of the tests given by the Brit. Pharm., not only of the "chemicals" (to which the title would seem to restrict it), but also other official substances, such as opium, oleum olivæ, pepsinum, &c., &c. Besides the official tests, which are suitably explained and commented upon, a number of others are added, with many practical hints on manipulation. The subject of the assay of vegetable drugs is not touched upon, except where the Pharmacopœia itself requires it—for instance, under Ext. Nucis Vom., Opium, Spir. Ætheris Nitrosi, &c. The last-named article is particularly well treated. We can recommend the little book as being very useful also to the American pharmacist.—*American Druggist.*

THE *Canadian Pharmaceutical Journal* thus reviews the Manual in its August issue:—"This work differs from those of a purely chemical character, inasmuch as it is designed to meet the requirements of the busy pharmacist, who generally cares more to ascertain whether an article is fit for use than whether it is absolutely chemically pure. It is assumed that absolute purity is only theoretically attainable, and that it is better to define, within clear and reasonable limits, what may be allowed in practice than to give definitions which, from their impracticable nature, become a dead letter. The reagents and apparatus specified are only those that should be found in any well-appointed pharmacy, and the processes are not beyond the knowledge and experience of the average druggist.

"The arrangement is simple, the various articles, including all the prominent official compounds, being under separate headings, classified alphabetically. . . ." The paragraph on chloroform is then quoted as representing the average treatment of the subjects, and our contemporary proceeds to say: "Mr. Proctor, who is also the author of 'Lectures on Pharmacy,' is himself a druggist, and evidently knows thoroughly the requirements of the class. His work has been thoughtfully and carefully done, and will be sure to meet with the appreciation that it well merits."

THE *Druggists' Circular* puts its opinion of Mr. Proctor's book very happily. This is it:—"The student of pharmacy, if he be worthy the name student, generally leaves college filled with plans of future useful application of the various knowledges gained at so great a cost of waking hours, study, and hard work. Then comes the pressure of business cares, the added responsibilities of ownership, if he be so fortunate, and so vanish his plans and change his purposes. The book before us offers in concrete and easily applicable form just the points essential to render easy the realisation of at least one worthy portion of the student's hopes—the practical testing of his goods. Without such a guide the student may be at some loss as to how to apply his theoretical knowledge to the best advantage. By its aid any intelligent pharmacist can have the satisfaction of being able to vouch for the purity of his drugs from his own personal knowledge. . . . The work contains much that would be useless to an expert analyst, but which is of value to the class for whom it is intended. In using it, the American pharmacist should remember that the standards adopted are those of the British and not of the U.S. Pharmacopœia."

THE reading cases which we offer to subscribers are now used by a very large number of chemists, and are found very convenient. They keep together thirteen numbers in very tidy form, always ready for reference. By having two cases in hand the numbers of a complete volume are always available until the time comes for binding. We sell these cases at the office for 1*s.*, or by parcels post 1*s.* 3*d.*, or two for 2*s.* 3*d.* We cannot forward them to any house for enclosure, nor by any of the carriers, as in the latter case we have to pay for booking.

C

FIRE AT THORLEY & CO.'S MILLS.—Early on Saturday morning, at the warehouses and mills of Messrs. J. Thorley & Co., cattle-food manufacturers, Caledonian Road, N., an explosion occurred, and on the police proceeding to the premises the watchman was found in an insensible condition near the doorway. Immediately afterwards a fire broke out, and, owing to the inflammable and oily nature of the goods stored, it spread with alarming rapidity, and in a very short time the whole building was enveloped in flames. Fire-engines were telegraphed for from all parts of the metropolis, but the efforts of the firemen were of no avail, and before daylight the buildings were completely gutted and severe damage done to a storehouse at the back. Some difficulty was experienced in rescuing the horses from the stables, owing to the alarm which the unusual glare caused the animals. They were, however, rescued in safety after some of them had been hacked into the Regent's Canal. The loss is covered by insurance.

PRESCRIBING CHEMISTS.—At an inquest held at Shoreditch on Saturday by Dr. Macdonald respecting the death of Clara Just, aged 74, a widow, it transpired that deceased had a severe attack of diarrhœa, and her son went to a chemist in Pitfield Street, who gave him a bottle of mixture. This had no effect, so witness went again, and said he thought, as the mixture had not done her any good, he should call in a doctor. The chemist, however, persuaded him to give his mother an ounce of castor-oil, saying, "If that does not work, it is no good calling a doctor." The oil was given, and on Thursday the chemist prescribed a second ounce of castor-oil, which deceased took, but died the next day. The Coroner: If the chemist had not deluded you that she would get better, you would have gone for a doctor? Witness: Yes; I should have gone at once for one. The Coroner: You should not take any notice of what a chemist says if you think it a case for a doctor. You should have called one in. Dr. Kennedy, of 2 Kingsland Road, who was called in after death, attributed death to excessive diarrhœa. In all probability she would have recovered if a doctor had been called in in time. A Juror: Don't you think it was wrong of the chemist to give two ounces of castor-oil, one day after another? The Coroner: Yes. I think it is very serious to go on giving it day after day. I think it very desirable, if the statements made are true, that chemists should take warning by this case. If the chemist had misled the son at first, he ought not to have given him a second bottle after the first had failed. A Juror: I think the chemist ought to be censured. The Coroner: You cannot censure a man unheard, but if you desire it my officer shall go and speak to him and tell him what you say. The jury eventually returned a verdict in accordance with the medical testimony.

Provincial Reports.

Items of news, and newspapers containing matters of interest to the trade, sent to the Editor will much oblige.

BIRMINGHAM.

"SOUTHALL'S EXPRESS" are the words emblazoned on a light dogcart in which the Bull Street firm now despatches parcels around the district.

TO BOTANISTS.—Fine specimens of *Atropa belladonna* may be seen growing wild near the Wren's Nest quarries, Dudley. It is not usual to expect it in these parts.

THE MASON COLLEGE authorities have recently appointed Professor Heath its "Principal," and the Queen's College have appointed Professor Windle "Dean of the Medical Faculty."

BRIGHTON.

A SECOND CHEMISTS' EXCURSION this year took place last Wednesday, when a small party of nine met at the railway station. The party travelled to Portsmouth Harbour by train, and then embarking on the *Heather Bell* steamboat had a sea-trip round the Isle of Wight. The weather was beautifully fine, the sea calm, everyone escaped *mal de mer*, so enjoyment was complete. Luncheon was taken on the boat. Returning to Southsea late in the afternoon, a substantial meat tea was taken at the Grosvenor Hotel. After tea, the party engaged vehicles to take them to the principal sights of Portsmouth and neighbourhood, and after spending an hour on the Southsea Esplanade Pier, returned home by the last train.

GRANTHAM.

LAUDANUM UNDER THE PATENT-MEDICINE STAMP.—At an inquest held here on Thursday, August 14, regarding the death of William Parker, 74, a joiner, from laudanum poisoning, it was proved in evidence that deceased had intentionally taken an overdose of a "narcotic mixture," which was sold to him by Thomas Wright, of Caythorpe, a grocer and draper. What this "narcotic mixture" was came out when Wright was called to give evidence. He said he sold patent medicines, and knew the deceased, who occasionally came to his shop. On Monday last deceased came to witness's shop, and asked if he had got a small bottle of laudanum, as he (deceased) wanted to mix some oils. Witness told him that he had some "narcotic mixture," which would answer the same purpose. It was labelled "Poison." Deceased then purchased the bottle for 1*s.* 1½*d.* The bottle produced was similar to the one witness sold to the deceased. Dr. Geo. Barton, of Fulbeck, deposed to attending deceased, and he said that there was a distinct odour of laudanum in his breath. A son of deceased also deposed that the "mixture" was a dark-coloured liquid.

MANCHESTER.

A BREEZE.—The Manchester Pharmaceutical Association has not enjoyed a career of unvarying prosperity, but it keeps itself clean and respectable, and looks backwards and forwards on and towards better days. When its very distant aristocratic relative, Owens College, asked it the other day to take a stroll round the city arm-in-arm, the temptation was too great to be resisted. The result was that a circular was issued to Manchester pharmacists covering a prospectus of the Pharmaceutical Department of the O.C., signed on behalf of the Council of the M.P.A. by the vice-president and honorary secretary, expressing the hope "that you will use your influence to induce young men preparing for the Minor or Major Examination to avail themselves of the sound instruction now offered." In reply to this, Mr. W. Spencer Turner, director of the Manchester College of Pharmacy, has sent round a somewhat stinging rejoinder, suggesting that the Council might as fairly send a circular to the physicians of the city advising them to recommend certain chemists in Exchange and Market Streets, to the exclusion of all the other reliable and conscientious pharmacists in the neighbourhood, as scientific dispensers and dealers in drugs and chemicals. Mr. Turner thinks Owens College is quite rich enough to do its own canvassing, and he claims that his own work in the conduct of his school during the past eight years has been good enough to justify him in expecting at least a fair field.

IRELAND.

THE WEEK'S POISONINGS.—The death by an overdose of chloral is announced of John Boyle O'Reilly, the celebrated Irish "patriot."

FIRE.—On Tuesday last a small fire occurred at the premises of Mr. P. Duggan, chemist and druggist, Duke Row, Dublin.

DRUG CONTRACTS.—Tenders for a year's supply of drugs, medicines, and appliances are invited by the Poor Law Guardians at Ardee, August 26, and by the Strokestown

Union, with workhouse and several adjacent dispensaries, September 5.

THE POISONING OF POLITICAL PRISONERS.—On August 14, in the House of Commons, Mr. John O'Connor asked the Home Secretary regarding Durbin, the compounder at Chatham, whether that official had been degraded and removed to another prison, if he had since been reinstated in his former position, and if he is now compounding medicines for the treason-felony prisoners at Chatham. Mr. Matthews replied that Compounder Durbin was reduced in rank and removed to Portsmouth Prison; but subsequent investigations being found satisfactory, he was reinstated, and would be employed as compounder at Dartmoor, his place at Chatham being taken by the Dartmoor compounder. In reply to further questioning, the Home Secretary said it was not true that Durbin had been reported for negligence in the performance of his duties. An analysis of the prisoner Daly's medicine showed that it contained too much belladonna, but it was afterwards ascertained that Durbin, who compounded the prescription, was not to blame. In the second and fuller investigation it was found that the origin of the excess of the drug was the store-bottle, to which no suspicion was at first attached. The inference of the analytical examiners was that the compounder had put in more than he ought, but the subsequent inquiry exonerated Durbin.

SCOTLAND.

DUNDEE.

A LAVENDER BOOM.—The arrival of the "Sweet Lavender" Theatrical Company here this week has been the means of creating a demand in the centre of the town for toilet requisites, &c. Before the commencement of each performance the theatre is perfumed with aq. lavandulæ by Mr. D. McKay, chemist, Dundee.

CRICKET.—The assistants' team met the "Airlie" (chiefly drapers) at Stobsmuir on Wednesday afternoon. The pestlers only scored 14 at their first attempt, to which their opponents replied with 56. The chemists tried again, and had reached 32 for two wickets when time was called. This was the last fixture with any outside club this season, as the half-holiday period closes on Wednesday, August 27. On that date a short excursion is to be arranged, when the apprentices will engage with the assistants in the field.

GLASGOW.

ENTERTAINMENT.—On Thursday of last week Mr. Charles T. Cockburn, of the drug-stores, 23 Howard Street, entertained his employés at his residence, Strathbungo. Between forty and fifty sat down to an excellent supper, after which dancing was indulged in, and carried on till an early hour in the morning.

PAISLEY.

FIRE.—A fire broke out on the evening of August 17 at the shop of Mr. T. H. Harrison, druggist, Gilmour Street. The fire-brigade were promptly on the spot, and speedily overcome the outbreak. The fire originated in the cellar, where a large quantity of oil was stored, and this becoming ignited an explosion occurred, whereby one of the firemen was rather seriously burned. Considerable damage was done by water to the contents of the shop, but the loss is covered by insurance.

VALERIANIC ACID IN VINEGAR.—M. Julien Girard reports in the *Journal de Pharmacie* that he has recently found valerianic acid in a sample of "white wine vinegar." This probably had been derived from amylic alcohol, which Professor Held, of Nancy, has lately mentioned as an adulterant of vinegar.

GUAIACOL-SALICYLATE.—Following the discovery of the compound of benzoic acid and guaiacol (benzosol) is that of a guaiacol-salicylate by Dr. Von Heyden's successors. It has a composition represented by the formula

$$C_6H_4.OH.COO.C_6H_4O.CH_3.$$

Its therapeutic properties have yet to be determined.

General News.

THE CLEAR PROFITS of the Pharmacie Centrale of France last year amounted to 703,306f.

NITRATE OF SODA.—There are forty-five works in Chili producing nitrate of soda, and some of these produce less than half of their declared capabilities.

ALKALI IN THE U.S.A.—It is stated that the Solvay-process works at Geddes, near Syracuse, N.Y., will soon be able to supply almost the entire demand for alkali in North America.

THE HALF-HOLIDAY.—The chemists of Halifax have resolved to close their shops at 1.30 P.M. on Thursday, and to re-open at 5.30 P.M., for a short time only, for the supply of necessary medicines.—The chemists of Elland close on Tuesdays at 1.30.

PHARMACIES IN RUSSIA.—The latest official reports show that there are 2,841 licensed pharmacies in Russia, consisting of 1,937 principal and 125 branch establishments, 697 village pharmacies, 13 homœopathic, 22 hospital, 2 manufacturing, 30 military, 13 mountain, 1 railway, and 1 Crown pharmacy.

THE NAVAL PHARMACISTS of Brazil have recently been ordered to wear uniform, and they are reported not to like it, and have told Admiral Wandenkolk so; but the Admiral replies to them that if they do not like the uniform fixed for them, they can go and make pills elsewhere.

METRIC SYSTEM IN RUSSIA.—Russian medical and pharmaceutical students are to be examined in the metric system, the Government having resolved to make this system the only legal one for prescriptions to be written in after five years. It is intended to abolish the use of the so-called Nurnberg weights, which are still in very general use in prescribing and dispensing.

THE NEW ITALIAN PHARMACOPŒIA is expected to appear before the end of this month. Among the more interesting of its features will be the list of medicinal substances which may freely be sold by anyone, and of those which may also be sold by unlicensed pharmacists, subject, however, to "the limits of quantity as by law established." There will also be a scale of the prices of medicines, which is to be fixed from year to year by the Ministry of the Interior.

THE BEANFEAST SEASON is at its height just now, and while it is on it is worth recording that the pharmacists and physicians of Matteawan and Fishkill Landing, N.Y., recently spent a day in the country together. The drug-stores were all closed at 10.30 A.M. for the day, and the doctors left their offices in the same fashion. It is seldom that we hear of such fraternising between the prescriber and dispenser.

TOOK THE LINIMENT FOR THE COUGH-MIXTURE.—A man named White, an engineer, living at Poplar, came home from his work the worse for drink, but quite sensible, and went to his bedroom. In a cupboard were bottles, one containing balsam of aniseed and another a belladonna liniment. White seems to have taken the latter in error for the balsam, and he died in consequence. At an inquest, held on Monday, a verdict of "Death from misadventure" was returned.

TWO CHILDREN POISONED.—At the inquest regarding the death of the two children mentioned in our issue last week, it transpired, on the evidence of Dr. Watkin, that death was due to arsenical poisoning. The children had eaten some rice-pudding the day before their death, and this the doctor found by "a rough analysis" to contain arsenic; but how it got there no one knows, so the police are making further inquiries. As the result of these, they have arrested the father of the children, and on Friday, August 15, he was brought before the magistrates at the Manchester Police Court on a charge of poisoning. Mr. Charles Estcourt, city analyst, found over 300 grains of white powder (mostly arsenic) in the pudding-dish, and a packet of that poison was found in the house.

POISONED BY QUININE.—At Weston-super-Mare, on August 13, an inquest was held in reference to the death of Mr. J. M. Robertson, landlord of the Globe Hotel. Dr.

Craddock was the coroner. The deceased had been a sailor for thirteen years, and had been troubled with ague and a sluggish liver. On the previous Monday he was taken with ague, and his wife sent for Dr. Blundell. On the morning of that day deceased took a double dose of quinine, and at noon he took twelve grains. At half-past three he was shaking all over. When the doctor came he ordered some stimulants, and deceased got slightly better. He got worse, however, between nine and ten, and was unable to swallow, and died at half-past ten. Dr. Blundell said the symptoms were those of excessive doses of quinine, not of ague, and a verdict to this effect was returned.

A Sponge Action.—At the Chelmsford County Court on Monday, Harris & Co., sponge importers, City Road, E.C., brought an action to recover 7*l.* 15*s.* for a box of sponges sold to Richard Ward, shopkeeper, London Road, Chelmsford. Defendant paid 7*l.* 1*s.* into court. He explained that plaintiffs' traveller offered him a case of sponges, declaring that the whole of them were as good as those at the top, which were of good quality. Defendant bought on the understanding that he could return the sponges, the traveller's card having something to this effect on it. When he came to turn out the sponges he found a lot of small and rotten ones underneath. He at once wrote the firm on the subject, who would not meet him in the matter, and he ultimately returned three dozen by parcels-post, which plaintiffs refused to take in, and defendant had never seen them since. He put in a portion of the correspondence that had taken place between the parties; but Judge Abdy remarked that plaintiffs should have been informed of this, and defendant ought to have had a solicitor to act for him. No evidence was offered for the plaintiffs. The Judge gave a verdict for the amount paid into court only, and allowed the defendant his costs. Addressing counsel for the plaintiffs, the Judge added that the traveller should be told to be more straightforward in the future.

The Hyoscyamine Case in New York.—The druggist's assistant, Lee Roberts, who dispensed the crystalline hyoscyamine, which was at first believed to have caused the death of Nicholas Carroll, has been exonerated by the jury from responsibility for the patient's death, but censured for having dispensed one medicine (Merck's crystalline hyoscyamine) when another (Merck's amorphous hyoscyamine) was prescribed. At the inquest Dr. Robert G. Eccles, a member of the committee of revision of the U.S. Pharmacopœia, gave expert evidence. He said Merck's amorphous hyoscyamine, called for by the prescription, was properly known as hyoscine, but both that and the crystalline hyoscyamine possessed the same properties, and while the crystalline was regarded as stronger than the amorphous, yet the safe dose of each was the same—about half a grain. No fatal case from the use of the drug was on record so far as Dr. Eccles could learn. The dose given by Dr. Hutchinson was one-eighth of a grain, and with it the same amount of morphine, the bane and the antidote in the same dose, reducing the strength to about one-twelfth of a grain. According to the statement of Dr. Wallis, one of the attending physicians, that the patient's tongue and mouth were moist at the time he died, the poison must have been eliminated from his system and could not have occasioned death. The prescription was shown to Dr. Eccles and a bottle of hyoscyamine crystalline. He said he would not have put up the prescription from it without consulting the physician, because he believed the drug meant was hyoscine, but he did not believe it would have made any difference to the patient, as one was as safe as the other.

Strychnine Solution in the Morphia-bottle.—An inquest has been held at Wellington, New Zealand, regarding the death of Mrs. W. H. Bennett. From the evidence it appeared that Mrs. Bennett had for some years suffered from a painful internal complaint, which necessitated the administration of small doses of morphia, and she had contracted such a taste for the drug that latterly she was taking a teaspoonful for a dose. The doctors attending her were well aware of it. One of these doctors—Dr. Pollen—had a consulting-room in the shop of Mr. W. C. Fitzgerald, of Wellington, and on July 8 a 4 oz. bottle was sent to Dr. Pollen to be filled with morphia solution. This was handed to Mr. Fitzgerald to be filled, and, in answer to his remark that the dose was a large one, the doctor replied that the patient was accustomed to take a teaspoonful at a time. Mr. Fitzgerald then filled the bottle. The patient took a teaspoonful of the solution, and shortly afterwards began to suffer great pain, and died within a few hours. The symptoms exhibited by the deceased were quite in accordance with strychnine-poisoning, and the evidence of Mr. Wm. Inglis, assistant to Mr. Fitzgerald, showed there was no doubt that the bottle had contained strychnine solution, and not that of morphia. After Mr. Fitzgerald had dispensed the solution, Inglis went to refill the bottle, and asked the shop-boy to bring the stock-bottle of the morphia solution; the boy brought a bottle which had not been opened, and Inglis sent him back for one which had been partially used. The boy returned saying that there was no such bottle. Inglis went to find it himself, but could not, and it flashed across his mind that there had been some mistake, and tasting the solution of morphia in the shop-bottle, he found that it was much too bitter for morphia. Mr. Fitzgerald was then informed of the matter, and he found that it was really solution of strychnine which was in the morphia-bottle. He at once informed Dr. Pollen of the fact, and, although no word had been received from Mrs. Bennett, Dr. Pollen immediately went to her, in the hope of preventing any accident; but he arrived too late, for she had already taken a dose, as stated, and death could not be averted. At the inquest Mr. Fitzgerald stated that an assistant, who had since left him, had filled the dispensing-bottle, and although he had on several occasions dispensed from it, the quantities had been so small that the fact of the solution being one of strychnine had not been discovered. The inquest was adjourned to enable the police to discover the whereabouts of the assistant who filled the stock-bottle.

FRENCH PHARMACEUTICAL NEWS.

(From our Paris Correspondent.)

Re-vaccination in Schools.—Henceforth all school children, aged 10 and over, are to be re-vaccinated as a condition of admission or continued attendance. One of the arguments in favour of the measure is that while in London, with compulsory vaccination, but one death occurred in 1889, 139 deaths were caused by smallpox in Paris.

Spring-scales must Go.—In conformity with advice from the weights and measures commission, the Minister of Commerce has issued an order prohibiting the public use of spring-scales of all descriptions. Those weighing implements are, no doubt, most convenient, but they are so treacherous that their motto should be "Short weight as a fine art made easy."

Exhibition Awards.—At last the successful exhibitors are to receive the medals and other tokens awarded at the late Exhibition. Medals and diplomas are now ready at No. 16 Avenue de la Bourdonnais, for exhibitors in classes 1 to 44 inclusive. For the present the distribution just stops at class 45—chemicals and pharmaceuticals; but it is said the classes following will not have long to weight.

Montpellier *v.* Marseilles.—The fight still rages between the two southern cities about the location of the proposed university. Some time since the whole Montpellier municipal council resigned *en masse*, as a protest against the possible transfer of their Faculties and Superior School of Pharmacy to Marseilles. Last Sunday the twenty-seven protesting councilmen were elected almost unanimously, even the bishop walking to the polls and casting an open ballot in favour of the Republican candidates.

Camphor-poisoning.—At Armentières (Nord) a woman, whose five-year-old infant was troubled with intestinal worms, gave the child a rectal injection composed of sweet oil with a piece of camphor "the size of the thumb" held in solution. Half an hour later the little patient began to utter fearful screams and to complain of violent abdominal pain. Medical aid was procured, lukewarm-water injections were administered, and other means employed, but the child died the day following from convulsions and nervous exhaustion.

A Promising Pharmacien.—On Tuesday, a young man named Perin called at the warehouse of Messrs.

Poulenc Frères, chemical manufacturers, 92 Rue Vieille-du-Temple, with an order from M. Alexandre, pharmacien, for 5 lbs. antipyrin. The young gentleman had "had" Messrs. Poulenc twice before in a similar manner. This time he was handed over to the police. He confessed that he had formerly been an apprentice with M. Alexandre, and had possessed himself of some of that gentleman's bill-heads, which he was using in this illegitimate manner.

COUNTERFEITING PERFUMERY-BOTTLES.—A long-contested counterfeiting case has been finally disposed of by the Cour de Cassation. In 1886 Raynaud, the proprietor of the Legrand "Oriza" perfumery trade-mark, and Meyer & Cie., Pinaud's successors, both Paris firms, together with Piesse & Lubin, and Atkinson, of London, caused a search to be made in Rougnon's glass-making establishment. The complainants charged that Pupil & Granjon, perfumers at Buenos Ayres, had ordered through Moureu, a commission dealer, a number of bottles bearing their counterfeit trade-marks, and that defendant knowingly executed the said order. On searching the premises no counterfeit vials were found, but correspondence was seized proving that such orders had been given by Pupil & Granjon, and executed by Rougnon. The Seine Correctional Tribunal, before which the case came up in the first instance, held that there was no proof of counterfeiting, dismissed the case against defendants, and sentenced the four complainants to jointly pay to Rongnon 5,000f. damages for injuring his business standing. It should be remarked that there was some conflict in the testimony as to whether the order had been executed or not. Upon appeal, however, on December 28, 1888, the Paris Court of Appeal reversed the lower court's decision, holding that the correspondence seized, whose genuineness was not disputed, clearly showed that the order for counterfeit bottles was executed, and that the trade-marks blown in the vials, if not absolutely identical with the genuine, were similar enough to deceive purchasers. As regards the English appellants, their case, being governed by special statutes, they were relieved of all payment of damages, but not of the costs of the first instance. On the other hand, Pupil & Granjon and Rougnon were sentenced each to four months' imprisonment and 1000f. fine; Moureu to one month and 100f.; and the four jointly to 2,000f. damages to each of the French complainants, publication of judgment, and costs. And now the Cour de Cassation has confirmed the Court of Appeal's decision.

CRITICISING THE MUNICIPAL LABORATORY.—Owing to serious irregularities in the institution and numerous complaints, the late municipal council some time since decided to reconstruct the Municipal Laboratory, and appointed a commission to consider the question. A new council has lately been elected, and now the central syndicate of French chemists and assayers, fearing that the old commission's report may be adopted, have petitioned the council against such a step, giving very good reasons why the old errors should not be persisted in. The laboratory, they submit was originally instituted to repress frauds and falsifications in alimentary products, and to make analyses directly interesting public hygiene. But soon it overstepped its legitimate duties, by accepting, and even soliciting, from all parts of France and Algeria, paid analyses of soils, minerals, and biological products, and finally attempting, against all law, to test the medicaments kept by pharmacists. Instead of remedying the evil, the commission proposed to still further extend the laboratory's operations, to increase the number of its chemists and bureaucrats, and, in fact, to make it one of those public services so dear to "possibilist" politicians, and dear, in another sense, to taxpayers. The petitioners believe it is unjust that, after paying heavy licences, rates, and taxes, they should be required also to maintain an institution intended to compete with them, and openly boasting of making cheaper analyses. In consequence, the syndicate of French chemists and assayers respectfully pray the Paris Municipal Council "to so reorganise the Municipal Laboratory that (1) the laboratory be, and remain, confined to its usual attributions; (2) that it be exclusively limited to the analysis of alimentary substances and products interesting public hygiene; and (3) that it be strictly forbidden to undertake commercial analyses for any persons or private corporations." The document is signed by E. Durin, president of the syndicate.

RAILWAY TRAFFIC RATES.

THE sub-committee appointed by the wholesale druggists of the chemical trade section of the London Chamber of Commerce, consisting of Mr. Wm. H. Francis (Hearon, Squire & Francis), Mr. F. H. Lescher (Evans, Lescher & Webb), and Mr. C. Umney (Wright, Layman & Umney), Mr. Thomas Tyrer (May & Baker), chairman of the section, presiding, met on Tuesday afternoon to consider the draft classification of merchandise traffic applicable to the London and North-Western Railway, issued as the result of the prolonged inquiry held by Lord Balfour of Burleigh and Mr. Courtenay Boyle on behalf of the Board of Trade.

Mr. UMNEY stated that, as a result of a careful perusal of the proposed maximum charges for haulage, terminals, service, &c., in comparison with the charges actually made by the companies at the present time for drugs, he had come to the conclusion that the tribunal had arbitrated between the companies and the public with great fairness. While it was quite true that the freight on small consignments, say, of one-half up to 2 cwt. would show an average advance of fully 20 per cent., still in packages of 3 to 5 cwt. there would be an average decreased charge of about 7½ per cent. Possibly the net average advance in freights, if charged at maximum rates and for consignments under 5 cwt, would be about 12½ per cent. Before the controversies began, it was thought by Mr. Barron and other members of the committee—that a 10 per cent. increase would be a fair concession to make to the companies. It would appear, therefore, that the arbitration so far had been very even-handed. In reference to the definition of "smalls," it was thought by the committee that the weight might be fixed at 2½ cwt., and then later, after the sitting of the tribunal in Edinburgh, it was hoped that English "smalls" might be made identical with those recognised in Scotland for years past, viz., 2 cwt. The amount fixed in the new draft classification is, however, 3 cwt. This, of course, was acceptable, considering that the companies originally proposed 5 cwt. The classification of goods which druggists handle is left in pretty much the same position as for years past, the companies having yielded almost entirely to the wish of the trade in a preliminary conference held before going to the tribunal. Two chemicals, however—citric and tartaric acids—must be excepted from this remark; but after the statement made by the chairman of the London Chamber of Commerce (Mr. David Howard) before Lord Balfour, he (Mr. Umney) believed that these had been left in Class 4 by oversight rather than by design. He hoped it would be possible later on to get these put into Class 3.

Mr. LESCHER, who addressed Lord Balfour at Westminster upon castor and other oils handled by druggists, referred to the excellent classification now proposed for oils non-dangerous. This new classification, he showed, was advantageous to the trade as compared with the present freight charges, and was entirely different to the original proposals of the railway company.

Mr. FRANCIS, in referring to the statement in reference to the carriage of "small" parcels (3 cwt. and under), pointed out that the actual charges named were to be at "per parcel," and no mention was made of per consignment. Of course it might so happen that a consignment of drugs weighing under 3 cwt. might be made in two or more hampers, and the charge applicable to "smalls" might, according to the strict wording, be made on each hamper, and not on the consignment as a whole.

The great importance of this point was seen, and it was agreed that the matter should be referred to the Mansion House Committee, so that no misunderstanding at any future date might arise.

The Chairman and committee finally discussed the "empties" question, in reference to which the proposition is that the rate for carriage shall not exceed 75 per cent. of the maximum rates and charges for the class of merchandise carried in the packages when full.

Mr. UMNEY thought that this was the most unsatisfactory feature in the decision of the tribunal, and said that senders of "empties" must be prepared for an advance of at least 50 per cent., possibly more. This was the general opinion of the committee.

Legal Reports.

An Unqualified Partner.

At the Birmingham Assizes, before Mr. Justice Lawrence, on August 15, William Glover, formerly of Wednesbury, chemist and druggist, sued John Withers, of West Bromwich, carrying on business as a chemist and druggist [but unqualified], to recover damages for the refusal of the defendant to give effect to a partnership with the plaintiff in carrying on the business at West Bromwich, and to obtain an injunction restraining the defendant from carrying on the business on his own behalf, and an order declaring plaintiff to be a partner in the concern. Mr. Harris, Q.C., and Mr. Hugo Young appeared for the plaintiff; and Mr. Jelf, Q.C., with Mr. A. T. Lawrence and Mr. A. Erle Richards, for the defendant. The case for the plaintiff was that up to April, 1889, the business at West Bromwich was carried on by Mr. John Bullas, to whom Withers was then an unqualified assistant. In that month Bullas died, and his sister wishing to dispose of the business, plaintiff entered into negotiations with Withers for a joint purchase of it, with a view to partnership. Plaintiff paid 200*l.* towards the price of the goodwill and stock, and agreed to pay a further sum of 175*l.* at a future date. He gave up his business at Wednesbury, and joined Withers in the business at West Bromwich, which was carried on by the two until May, 1890, with the result of a profit of 800*l.* on the year's trading. The business when it was bought was assigned to the defendant, and at the end of the first year plaintiff was told that he was not a partner, and that defendant treated the money which plaintiff had advanced as a loan, the consideration for which was the prospect of defendant taking plaintiff into the business as a partner at some subsequent time. Defendant suggested that he should repay the money, and that plaintiff should leave the concern, but plaintiff declined to accept this arrangement and brought the present action. Defendant then tried to float the business as a limited liability company, but an interim injunction had been obtained restraining him from doing this. The plaintiff now asked for an injunction restraining the defendant from so disposing of the business; he also asked for a declaration that he was co-owner with the defendant of the business and stock, and that any sale without his consent was void, and, as an alternative, if declared not to be co-owner, he claimed 200*l.* cash advanced, with interest at 5 per cent. from the date that the business was acquired, together with 500*l.* as his share of profits or remuneration since the same date. Defendant admitted the agreement to purchase between himself and plaintiff, and that it was afterwards arranged that a partnership should be entered into, plaintiff paying him 200*l.* on account of the intended partnership, and assisting him to carry on the business. But he asserted that the terms of the partnership were never agreed upon; further, that, according to the provisions of the Pharmacy Act, the partnership could not be carried out, and that he accordingly offered plaintiff to repay the 200*l.* he had advanced, with 5 per cent. interest, and to pay him 171*l.* 1*s.* 4*d.*, half the net profits of the business for the year, as remuneration for his services. Miss Bullas, sister of the late proprietor, stated that the business was sold for 750*l.*, 390*l.* of which was paid in cash, and the remainder was secured on promissory notes of Withers and his father. The transfer was discussed with Withers only, and to him the business was transferred. The balance of the purchase-money had since been paid by Withers. Mr. Miller, solicitor to the plaintiff, stated that this year he discussed with Mr. Topham (representing the defendant) the question whether there could be a legal deed of partnership between a qualified and an unqualified chemist, and they agreed to submit a case to counsel, half the expenses of which Mr. Topham paid. Counsel advised that it would be illegal, and suggested a limited liability company. Mr. Jelf, for the defence, said that the partnership was given up by mutual agreement, as it was found that it would be illegal. The defendant had been willing to repay the 200*l.*, with 5 per cent. interest, and 171*l.* 1*s.* 4*d.*, half the net profits of the business for the first year. The defendant deposed that, having made up his mind to purchase the business, he communicated with several chemists with a view to getting a qualified man to lend his name to the business, or act as manager. At last he went to the plaintiff, and plaintiff agreed in join him in the business. The purchase was concluded without any reference to the plaintiff. The 200*l.* plaintiff paid was used in the purchase of the business, but defendant could have got the whole of the money from his father. Plaintiff never objected to the clause in the agreement giving defendant power to terminate the connection by three months' notice. Cross-examined: The 200*l.* was paid for the partnership. Defendant and plaintiff were to pay equal parts of the purchase-money of the business, and after the purchase was complete arrangements were to be made as to the profits of the business. The plaintiff was to pay interest on the balance of his half of the purchase-money to defendant's father. By his Lordship: He understood that part of the goodwill of the business would belong to the plaintiff. By Mr. Harris: He turned Mr. Glover out because he had lost all confidence in him—he was so irregular in his attendance at the shop. The shares in the limited liability company were allotted to his relations, who paid for them, not by money, but by notes of hand. Mr. Glover didn't get any shares. The shop was rated as in the occupation of Withers and Glover. The jury found a verdict for the plaintiff, and his lordship gave judgment in the terms of the claim, the 371*l.* paid into court to be returned to defendant.

The Sulphate of Ammonia Dispute.

In the City of London Court, on Tuesday, the case of Forbes, Abbot & Lennard *v.* Hecker was again before Mr. Registrar Wild, when, for the first time, the case for the defendant was gone into. The action, it will be remembered, was brought by the plaintiffs, chemical manufacturers, of Ingram House, Fenchurch Street, E.C., against Mr. Paul Hecker, trading as Paul Hecker & Co., chemical merchant, 14 Mincing Lane, E.C., to recover 40*l.* 5*s.* 8*d.*, the balance of an account of 6,640*l.* 5*s.* 8*d.* for sulphate of ammonia supplied. The defence was short weight. After hearing the evidence of several witnesses, and of the defendant, Mr. Registrar Wild said he would report to the Court the result of his sittings.

Patent Enemas.

The case of Ingram *v.* Sergeant was mentioned before Mr. Justice Lawrence, sitting in the Vacation Court on Wednesday. The plaintiffs are registered owners of certain patent enemas, and they ask for an injunction to restrain the defendants from selling or representing their goods as being of the plaintiffs' manufacture. It was arranged that the motion should not come on before next week.

BANKRUPTCY REPORT.

On August 14, at the Newcastle Bankruptcy Court, before Mr. Registrar Ingledew, George Cormack, chemist, of Newcastle and Durham, was examined by the Official Receiver, Mr. A. S. Maples. He said that during the last six years he had carried on business at Old Elvet, Durham, and at 143 Pilgrim Street, Newcastle. He commenced business in 1883, without capital. At the date of his receiving order he had 7*l.* in hand, which he deposited with his solicitor towards the cost of the petition. He owed to unsecured creditors 223*l.* 14*s.* 9*d.* His assets consisted of good book debts, 60*l.* 4*s.* 10*d.*; doubtful and bad, 102*l.* 18*s.* 5*d.*, estimated to produce nothing; surplus from securities, 50*l.* 10*s.*; total, 110*l.* 14*s.* 10*d.* He owed for preferential claims 39*l.* 13*s.* 7*d.*, so that his free assets were 71*l.* 1*s.* 3*d.*, and his deficiency was 152*l.* 13*s.* 6*d.* Debtor attributed his insolvency to the expenses incurred by the illness and death of his wife, which he put down at 20*l.*, to the loss of 90*l.* by reason of an injunction being made restraining him from selling certain fly-papers he had made, which were decided in the courts to be a "colourable imitation" of somebody else's papers, and to the excessive prices of stock in the Pilgrim Street shop, with decrease of trade and heavy expenses The only secured creditor was Mr. G. Richardson, who held

a bill of sale over the stock and furniture for 300*l.* The following is a list of creditors for amounts above 10*l.*:—

	£	s.	d.
Bourne, Johnson & Latimer, Furnival Street, London	12	8	11
Ismay & Co., Great Market, Newcastle	12	8	7
Lofthouse & Saltmer, Hull	13	17	8
North Eastern Printing Company, Newcastle ..	43	15	9½
Taylor, Gibson & Co., Bigg Market, Newcastle ..	32	19	0

Fully Secured Creditor.

	£	s.	d.
George Richardson, Blackett Street, Newcastle ..	279	10	0

The examination was adjourned for a fortnight.

Gazette.

THE BANKRUPTCY ACT, 1883.

ADJUDICATION.

Cormack, George, Durham and Newcastle-on-Tyne, chemist.

ORDER MADE ON APPLICATION FOR DISCHARGE.

Powles, William, Old Kent Road and Rosemary Road, Peckham, surgeon. Discharge suspended for three weeks from July 25, 1890.

TRADE-MARKS APPLIED FOR.

THE *Trade Marks Journal* publishes the following notice:—"Any person who has good grounds of objection to the registration of any of the following marks may within one month of the date of this journal, give notice in duplicate, at the Patent Office, in the form 'J,' in the second schedule to the Trade Marks Rules, 1890, of opposition to such registration." All communications to be addressed to H. Reader Lack, Esq., Comptroller General, at the Patent Office, 25 Southampton Buildings, Chancery Lane, London, W.C.

From the "Trade Marks Journal," August 20, 1890.

"OZONE" and "ECLIPSE BRAND," and representation of an eclipse; for chemical substances for veterinary, sanitary, &c., purposes. By R. K. Lakin & Co., 45 Market Street, Manchester. 96,969.

"CARBOLIC ACID," and various wording on label; for a perfumed solution of carbolic acid as a disinfectant and toilet article. By C. E. Mason & Co., 2 Beech Street, London. 97,938, 97,939.

"TYNSINE—SWIFT AND SAFE," on circular design; for medicines. By The Tynsine Company, 134 St. Vincent Street, Glasgow. 97,216.

"FLORAL VINOLIA SOAP"; for use in medicine and pharmacy; also perfumed soap. By Blondeau et Cie., Ryland Road, Kentish Town, N.W. 98,232, 98,233.

"FENNINGS' WHOOPING-COUGH POWDERS," and picture of child rolling a hoop; for a medicine. By A. Fennings, West Cowes, Isle of Wight.

"MATADI," and illustration showing two negroes; for an ointment and emulsion. By the Matadi Company, 3 and 4 Great Winchester Street, E.C. 98,584.

"YOUNG'S MELAURA," and wording on label; for perfumery and toilet articles. By R. D. Young, 100 William Street, New York. 96,710, 96,715.

Representation of three cherubs, with name, &c.; for dentifrices. By Alex. Friederich, Arnhem, Holland, 97,776.

"CORSAGE BOUQUET"; for perfumery and toilet articles. By Burroughs, Wellcome & Co., Snow Hill Buildings, London. 98,020.

THE SULTAN has conferred the fourth class of the Medjidieh upon M. Sophocles Neralis, druggist of the Greek Court, Constantinople, and the fifth class of the same order on M. Solon Delassopoulo, his associate.

BEFORE AND AFTER.

(*After* LONGFELLOW—the game's been tried *before.*)

THE summer showers were falling fast,
As on his way to London passed
A certain youth of Galen's race,
And this was written on his face—
"Unqualified!"

His eyeglass flashed his brow beneath;
He gnashed a faultless set of teeth;
And like an iron mortar rung
The doleful accents of his tongue—
"Unqualified!"

Indeed he was a weary wight:
His hopes were anything but bright;
For friends who had been "through the mill,"
And done their level best, were still
Unqualified!

"Think not to pass!" the croakers said:
"The traps they set are deep and wide;
Grind not so hard—you'll swell your head!"
"Alas!" the troubled one replied—
"Unqualified!"

"O stay," said Laura, "let me rest
My head on your half-guinea vest!"
A tear stood in his weather eye,
But still he answered, "Not till I
Am qualified!"

"Beware of Corder's stem and branch!
The Square you'll find a lively ranche!"
This was his governor's good-night,
And only added to his fright:
Unqualified!

* * * * *

At break of day, as o'er the town
The milkmaid with the eyes so brown
Dispensed her aqua font. and chalk,
She heard it all along her walk,
"He's qualified!"

For, very early, Laura found
Him dancing wild her window round;
She learnt his good news in a trice,
And sweetly gurgled, "Oh, how nice!
You're qualified!

No more the fear of fines to pay!
For you has dawned a glorious day.
All doubt and fear have fled afar:
You'll shine in business like a star—
You're qualified!!"

DUNALBA. (106/46.)

MARRIAGE.

[*Notices of Marriages and Deaths are inserted free if sent with proper authentication.*]

MARTEN—DANCY.—On August 13, at the Tabernacle, West Street, Brighton, by the Rev. W. Harbour, John R. Marten, chemist and druggist, of 40 London Road, to Annie E. Dancy.

DEATHS.

FOX.—On Saturday, August 16, Mr. Wm. Fox, of The Beeches, Woodford. Aged 75. The deceased gentleman was the head of the firm of Messrs. William Fox & Sons, wholesale druggists, Bethnal Green-road, E.

HAVILL.—On August 8, Mr. Paul Havill, chemist and druggist, Fore Street, Tiverton. Aged 81.

HOPKINS.—On August 3, Mr. Thomas Barker Hopkins, chemist and druggist, Tulse Hill, London, S.W. Aged 91.

WILLMOTT.—On August 5, in London, Mr. John Peter Willmott, chemist and druggist, late of Plymouth. Aged 80.

THE INTERNATIONAL MEDICAL CONGRESS AT BERLIN.

(From our Berlin Correspondent.)

THE Scientific Exhibition held in connection with the recent Medical Congress in this city was undoubtedly one of its principal attractions, affording as it did a graphic indication of the progress made in recent years in the arts contributory to medicine and pharmacy.

The exhibits were not by any means exclusively of trade interest. Many were illustrations of the various sections. Thus medical men showed photographs of specially interesting cases, or histological preparations, while quite an extensive department was made up of models delineating the various skin diseases, the characters of certain forensic cases, fractured skulls, special instruments, and other things which were thought to be of interest to professional colleagues.

Naturally the principal firms of chemical manufacturers and most of the leading wholesale druggists of Germany were represented. A few of these were honoured by the special invitation of the "Reichsgesundheitsamt" to exhibit in the department of the Imperial Health Office itself. A valuable characteristic of the exhibition was the perfect manner in which all the articles were labelled, and the abundance of descriptive catalogues in the three official languages which were distributed by individual exhibitors.

The exhibition collected by the Imperial Health Office occupied a raised platform in the centre of the machinery hall. To this many of the principal firms in Germany contributed by invitation. Messrs. Gehe & Co.'s exhibit was arranged in horseshoe shape, occupying about twenty-five square yards altogether. The centre contained new drugs which have already been therapeutically successfully applied. On the left were placed the "drugs of the future," and on the right a series of cabinet specimens of drugs of well-established repute. The open space was filled with original packages of sarsaparilla, rhubarb, &c. In all, over 700 drugs were included in this collection, and a very special educational value was given to this exhibit by the elaborate attention which had been given to every detail. Of *Carica papaya*, for example, were shown the flowers preserved, the thick fruit, as large as a child's head, with its black, shiny seeds, the dry, wrinkled seeds, and the papayin itself. American drugs, such as boldo, eschscholtzia, cheken, grindelia, hamamelis, jacaranda, turnera, viburnum, &c., were in considerable force. Among the drugs of the future were prominent several from Africa, including cortex doundaki from *Sarcocephalus esculentus*, a cinchonaceous plant, used by the natives like coca leaves in Southern America; *Dioscorea alata*, the "yams" root, from the Cameroons, used externally for ulcerations, and also as a food; "dadebesi," "dessoassi," "mramflô," "akromia," "boadscha," and others, no doubt very much in the future. Messrs. Schimmel & Co. sent an exhibit of very considerable money-value. Specially attractive were three pint bottles of otto of rose, distilled from 18,000 lbs. of rose leaves grown in the Fatherland. Hitherto the production of rose oil in Schimmel's factory has been only about 10 lbs. a year; but it is expected that the rose cultivation will bring in the next year about three times this quantity, and in two years ten times as much. The oil of ordinary onion was another very rare substance. From 5,000 kilos. of onions distilled only 233 grammes of essential oil of a red-brown colour and 1,036 sp. gr. at 19° C. were yielded. Oil of damiana was another novelty—perhaps a suitable adjunct to pick-me-ups.

The various terpenes and hydrocarbons which the firms showed are the outcome of the science of late years, these being, we may say, the active principles of the essential oils. Among these were anethol, which might be entirely substituted for anise oil, and of which the firm produces about 12,000 kilos. per annum; safrol, used as a soap-perfume, of which 120,000 kilos. are produced yearly; artificial wintergreen oil, with 10,000 kilos production, and many others.

E. Merck, of Darmstadt, is the head of a house which was established in 1668. Its exhibit at the Congress of 1890 is evidence that it is up to date, and still progressing. All the active principles, whether in common use, rare, or never used at all, were shown there. An interesting and valuable feature was the date given on each at which the firm commenced the manufacture of the article on a large scale Chrysophanic acid and arbutin are dated from 1857; cocaine in April, 1862, or twenty-two years before it was introduced into therapeutics by Koller and Freud. Among the more recent products which Merck shows is tritopine, a new opium base, discovered by his chemist, Dr. Kander. This body melts at 182° C., and is a strong base, neutralising the mineral acids. There are, besides, two new alkaloids from seeds of *Sabadilla officinalis*, which are not yet even named; they are distinguished from veratrine in that they are not sternutatory.

Other firms included in the Health Office Department were the Badische Anilin Soda Works, Ludwigshafen, the patentees of thallin and its salts, and now the producers of synthetical carbolic acid. Messrs. Bayer & Co., of Elberfeld, who had also a more extensive exhibit elsewhere, showed phenacetin and sulphonal, aristol in black bottles, and other sulphonals, the trional and tetronal. The whole may be represented thus:—

Sulphonal.

(Diethylsulphondimethylmethan.)

$$\begin{matrix} CH_3 \\ CH_3 \end{matrix}\!\!>\!C\!<\!\!\begin{matrix} SO_2C_2H_5 \\ SO_2C_2H_5 \end{matrix}$$

Trional.

(Diethylsulphonmethylethylmethan.)

$$\begin{matrix} CH_3 \\ C_2H_5 \end{matrix}\!\!>\!C\!<\!\!\begin{matrix} SO_2C_2H_5 \\ SO_2C_2H_5 \end{matrix}$$

Tetronal.

(Diethylsulphondiethylmethan.)

$$\begin{matrix} C_2H_5 \\ C_2H_5 \end{matrix}\!\!>\!C\!<\!\!\begin{matrix} SO_2C_2H_5 \\ SO_2C_2H_5 \end{matrix}$$

Meister Lucius & Brüning, of Höchst, had also a separate large show, in which the chief attraction was, of course, antipyrin, which was shown both in the ordinary form and in large groups of crystals. They submitted also benzosol, a new substitute for creosote and guaiacol in phthisis, in powder form. Antipyrin is said to have been sold by the patentees to the amount of about 270,000*l.*, at a net profit of 210,000*l.* and they are now hoping to have found a new gold-mine in their anæsthesin, a cocaine substitute. This substance is a white powder which is said to have an enormous local anæsthetic power. Its constitution is kept secret at present until the physiological tests and the patent have been completed.

Dr. F. v. Heyden Nachfolger, of Radebeul, Dresden, exhibited salol and euphorine, a new antipyretic and anodyne, besides a number of other new remedies.

Böhringer and Sons, of Mannheim, the well-known makers of quinine and other alkaloids, had a fine exhibit, among which cocaine was particularly prominent, supported by ecgonine, eserine, hydrastine, &c. Ichthyol, used largely in skin-diseases, and now in diseases of women, was prominently in evidence, and it was said that the company's show-case cost 250*l.*

Benno, Jaffé & Darmstaedter, the manufacturers of lanolin, submitted their specialty; and sixteen other exhibitors contributed preparations with lanolin as a base. It may be mentioned here that Dr. Darmstaedter, of this firm, had been one of the skilful organisers of the chemical section of this exhibition. In connection with lanolin we should remark that Dr. Liebreich exhibited for the first time a specimen of "lanolinum humanum," obtained from the vernix caseosa, pretty good evidence of the natural adaptability of the basis to the skin of human beings.

The soziodol preparations of H. Trommsdorf, of Erfurt, were also included in the official department, where was also the Diuretin Knoll, well known in this country. This, with codeine and therbromine, are the chief products of Knoll & Co., of Ludwigshafen.

Among the collection of the Imperial Health Office were also Riedel's chemicals, on which we shall have something to say further on; the pepsins, pancreatins, and peptones of Dr. Witte, of Rostock; and Zimmer & Co.'s acrolein, the new tapeworm remedy, as well as specimens of their cocaine, methacetin, phenacetin, &c. Julius Springer, the publisher, showed all the editions of the German or Prussian Pharmacopœias—viz., the Pharmacopœia Borussica, 1862; the

Pharmacopœia Germanica, 1872; the Pharmacopœia Germanica, ed. alter., 1882; the Deutsches Arzneibuch, 1890.

Microscopical preparations were in abundant force, including a number of interesting cadaveric alkaloids and ptomaines. Perhaps one of the most attractive to the scientist was toxipeptone, obtained from cultures of the cholera bacillus. Animals inoculated with this substance die with every symptom of the disease.

There were very few foreign exhibitors, except English, and it was evident that even these had insufficiently appreciated the importance of this gathering. Messrs. Burroughs, Wellcome & Co., of London, were the most prominent. This well-known firm, represented by Mr. S. M. Burroughs himself and a small staff, displayed under the flags of England and America a number of new and specially interesting exhibits. Their tabloids were the objects of general admiration, and speculation was rife among the circle of Teutonic visitors always collected round the stand as to the probable cost of the machine which could turn out such elegant goods. Vereker's chloride of ammonium inhaler was also highly praised, and several German physicians showed their appreciation in a practical manner by placing an order with the firm. For the benefit of English and American visitors, Burroughs, Wellcome & Co. had arranged a special department where the London dailies and the medical and pharmaceutical journals—including, of course THE CHEMIST AND DRUGGIST—were displayed, and could be perused by those who had time. The Stanley medicine-chest was, however, the *pièce de résistance*, and in the course of a few days it had to go through almost as severe a test at the hands of enthusiastic visitors as it underwent on the African continent. It was even inspected by the Empress of Germany, who listened with great interest to Mr. Burroughs's explanation of its arrangements. Are you aware that one of the cases that Stanley took with him was nearly entirely stocked with McKesson & Robbins' pills? These goods kept exceedingly well, and answered all requirements admirably. Another well-known British exhibitor was Thomas Christy, who was also personally present. Christia, menthol jujubes, and kola chocolates were among his contributions. Seabury & Johnson had a large show, but were chiefly represented by Mr. Jacobi, of Elberfeld. Their various rubber combinations were greatly admired by numerous visitors. H. Helbing, London, was represented by a little exhibit which proved attractive to a number of prominent men, as it contained many rare drugs selected from his collection, all of which had formed the subject of researches and publications by himself. There were, for instance, nine varieties of strophanthus, including *S. glabra*, which, he believes, contains the same active principle as *Carissa Schimperi*—viz, onabain. Then there were also six varieties of calabar bean and its adulterations.

Besides the department of the Gesundheitsamt, there was no lack of large exhibits. As an instance, that of Schering's fabrick auf Actien may be named. Conspicuous among a great variety of compounds, were chloral-hydrate, chloralamid, cocaine, and particularly attractive specimens of iodoform and of tannic acid, resembling hair in form and lustre. One might mention the beautiful samples of citrate and of perchloride of iron, but it would be impossible to do justice to an exhibit which did credit even to a firm of such established reputation as Schering's.

Kalle & Co., Biebrich, had a magnificent exhibit of their orexin in the form of an enormous group of crystals. Another striking feature was iodol, which is being again largely used in Germany.

J. D. Riedel & Co. had several exhibits. They gave prominence to sulphonal and phenacetin as manufactured by themselves, and also showed a specimen of "Antipyrin Riedel," which will continue to be little but a name until the Patent Office declares in favour of this brand of antipyrin—a very unlikely occurrence. Messrs. Riedel further submitted thiol, the rival of ichthyol, to notice. This compound was separately exhibited by Dr. Jacobsen, in the department of the Reichsgesundheitsamt, with some other of his productions, such as benzaldehyde, cinnamic acid, tannin, &c., manufactured according to his patents.

An exhibit of Chinese materia medica arranged by Messrs. Riedel was unique. The collection comprised 341 items, all arranged and labelled in appropriate Oriental fashion. The credit of procuring these specimens is due to Lieutenant Schäfer, who collected the drugs during a long stay among the Celestials.

Dr. Byk, Berlin, the well-known manufacturer of photographical chemicals, showed his pepsin, which has the reputation of possessing great digestive power.

A large number of firms showed compressed medicines. Among these I may mention C. F. Asche, Hamburg; Dr. Graf, Berlin, who also exhibited the preparation of ozone—viz., antibactericon; Richard Jacobi, Elberfeld; Max Jaspar, Berlin; Lewinson, Berlin; Radlaner, Berlin; and Dr. Kade's Oranienapotheke. Here we had an opportunity of seeing what foreign firms can do in the way of providing medicine-chests for African expeditions, and the comparison with the Stanley chest should satisfy future explorers that they can fix themselves up medicinally in London certainly as well as in any other city.

Bandages and dressings were shown in great profusion by Max Kahnemann, Berlin; M. Böhme, Berlin; Beckstrœm, Neustrelitz; Marwede, of Neustadt, Hanover; and by many other exhibitors. The last-named had a speciality in the form of surgical-moss preparations, which are very absorbent; being also cheap, they are used in some branches of military surgery in Germany. The numerous exhibitors of antiseptics should not go unnoticed, particularly Pearson, of Hamburg, who showed Jeyes' creolin, &c.

Brückner & Lampe, Berlin, had a show very similar in character and equal to that of Gehe & Co. A most interesting feature was a collection of drugs in original packages, such as opium, aloes, benzoin, coca leaves, musk, and sarsaparilla. There were, besides, the various drugs introduced from the United States, with a number of living medicinal plants such as *Gaultheria procumbens*, *Erythroxylon coca*, *Pilocarpus*, *Asarum canadensis*, *Lobelia inflata*, *Podophyllum peltatum*, and many more. There was also a fine collection of essential oils distilled by the firm.

That this short sketch of what was on view is very incomplete will by judged when I add that the exhibitors numbered over 1,100. Permit me to mention, in conclusion, that much courteous assistance was shown to me as your special correspondent by many gentlemen. Particularly I would wish to name Professor Liebreich, the president of the pharmacological section; Dr. Boettger, editor of the *Pharmaceutische Zeitung*; and Dr. Darmstaedter, the principal organiser of the chemical section.

WILLS OF DECEASED CHEMISTS.

The will of the late Mr. J. D. Adcock, of Alcester, chemist, who died on June 19, 1889, has been proved at Birmingham Probate Registry by Mrs. M. A. Adcock, the widow, and Messrs. W. Degge and Herbert D. Adcock, the son. The value of the personal estate amounted to 409*l.* 12*s.* 3*d.* The testator, after bequeathing his furniture, plate, and household effects in general for the use of his wife, leaves his property to his executors in trust for the benefit of his wife, with remainder to his three sons. He directs his trustees to carry on his business, with the assistance of either of his sons, so long as they choose. Upon the sale of the business, his son Herbert is to have first choice of purchase at a valuation.

The will, without date, but, in fact, executed on or about October 22, 1884, of the late Mr. Henry Highway, of Walsall, who died on January 24, 1890, was proved at Lichfield on April 11, by Mathew Henry Highway, the son and sole executor. The testator bequeaths 200*l.* to the Walsall Cottage Hospital, and 1,000*l.*, in trust for the use of his granddaughter Frances Elizabeth Oaks, with remainder to her children. The residue of his estate, real and personal, the testator gives and devises to his said son. The gross personalty amounted to 10,620*l.* 9*s.* 7*d.*

The will of the late Mr. F. W. Kent, of East Molesey, chemist, who died on April 4, 1890, has been proved at the principal Probate Registry by Mrs. Kent, the deceased's widow and sole executrix. The gross personal estate amounted to 893*l.* 6*s.* 8*d.*

THE NEW GERMAN PHARMACOPŒIA.

SECOND NOTICE.

Styli Caustici—Aetzstifte.

Caustic pencils are made by fusing crystalline chemical substances, or, when that is impracticable, by mixing the powdered substances with wheaten flour or powdered gum arabic, and massing with glycerine and water. When not otherwise stated, caustic pencils should be 4 to 5 cm. long and 4 to 5 mm. thick.

Suppositoria—Suppositorien.

Suppositories are for the first time recognised in the Pharmacopœia. General directions simply are given, no formulæ being appended. Oil of theobroma is the basis to be employed, and when this is melted the medicinal substance is to be mixed with it either as it is or in the form of solution. The suppository is then to be cast in the usual manner, and should be from 3 to 4 cm. long and 1 to 1·5 cm. in diameter at the thickest part. Suppositories are said to be cylindrical, ball-shaped, egg-shaped, or cone-shaped. Rectal suppositories should weigh from 2 to 5 grammes, and vaginal suppositories double that.

Tabulæ—Täfelschen.

Very little information of importance is given as regards the manufacture of tablets. The Pharmacopœia says they are to be made from substances generally in a warm state, and are brought into a flat, round form by mixing with an excipient of flavouring material.

The following are the principal new formulæ which have been introduced :—

Acetum Aromaticum—Aromatischer Essig.

	Parts
Oils of cinnamon, juniper, lavender, peppermint, and rosemary, of each..	1
Oils of lemon and cloves, of each	2
Spirit, s.g. ·830 to ·834	450
Acetic acid, s g. 1·064	650
Water	1,900

The oils are dissolved in the spirit and mixed with the acid and water. After eight days, during which it is occasionally shaken, the vinegar is filtered.

This preparation is substantially the same as the second edition one, but the acid and water are half as much again.

Adeps Benzoatus—Benzoeschmalz.

Made by adding 1 part of benzoic acid to 99 parts of prepared lard melted in a water-bath.

Emplastrum Cantharidum pro usu Veterinario—Spanischfliegenpflaster für thierärztlichen Gebrauch.

	Parts
Colophony	6
Turpentine (oleo-resin)	6
Melt on a water-bath, and, when half-cold, add—	
Powdered cantharides	3
,, euphorbium	1
Make into a uniform mass.	

Keratin.—Hornstoff.

Treat 10 parts of quill shavings with a mixture of 50 parts of ether and the same of spirit in a closed vessel for eight days, shaking occasionally; then pour off the solution, and wash the residue with warm water, after which place it in a solution of 1 part of pepsin and 5 parts of hydrochloric acid (s.g. 1·124) in 1,000 parts of water. It is to be digested for a day in this mixture at a temperature of 40° C., again washed, then dried and boiled with 100 parts of acetic acid in a flask fitted with a reflux condenser. The solution is to be filtered through glass-wool, evaporated to a syrupy consistence, and scaled.

Characters and tests for keratin are appended.

Liquor Ferri Jodati—Eisenjodürlösung.

To a mixture of water 50 parts and iodine 41 parts add as much powdered iron as will suffice to saturate the iodine, and afford a gum solution, which on cooling and filtering will contain in 100 parts 50 parts of ferrous iodide.

The Pharmacopœia Commission evidently did not know the English wrinkle for keeping this solution stable, for they direct it to be made when wanted, and when ferrous iodide is prescribed it should be made by evaporating this solution in an iron basin.

Liquor Ferri Albuminati.—Eisenalbuminatlösung.

	Parts
Egg albumen	35
Water	1000
Dissolve and add to a mixture of—	
Solution of oxychloride of iron	120
Water	1000

If it is necessary, promote precipitation with a sufficiency of a very dilute solution of soda to neutralise (solution of soda 5 parts, water 95 parts). Set aside to allow the precipitate to fall, and wash it until the supernatant liquor, acidulated with nitric acid, gives only a slight opalescence with silver nitrate. Then place the iron-albumen in a large bottle, and add to it:—

	Parts
Solution of soda..	3
Water	50
Shake well until dissolved, and add to the solution—	
Spirit	150
Cinnamon-water..	100
Aromatic tincture	2
Water, a sufficiency to make the whole weigh	1000

This solution contains 0 4 per cent. of iron.

Within recent years, preparations similar to this—generally called Dreesche's iron—have become very popular in Germany, and formulæ were multiplying at an alarming rate.

Mel rosatum—Rosenhonig.

	Parts
Rose petals cut small	1
Dilute spirit	5
Macerate 24 hours, shaking occasionally, press, filter, and evaporate to 10 parts with—	
Clarified honey	9
Glycerine	1

This is an improvement (by Dieterich) upon the old formula, which directed double maceration of the rose petals with water and spirit. The glycerine is an addition.

Oleum Cantharidatum—Spanischfliegenöl.

Made by digesting 3 parts of cantharides in 10 parts of olive oil in a water-bath for 10 hours, pressing and filtering. The oil is used for making an ointment—in fact, the formula is scarcely new, for it used to be incorporated under the ointment.

Sebum Salicylatum—Salicyltalg.

Made by dissolving 2 parts of salicylic acid in 98 parts of mutton suet melted on a water-bath.

Sirupi.

We may note that syrups of almonds, rhubarb, and senna have been slightly modified. The first-named no longer contains orange-flower water; borax has been added to the rhubarb syrup, and in the syrup of senna the quantity of water is increased.

Species Diureticæ—Harntreibender Thee.

	Part
Lovage root (Rad. Levistici)	1
Ononis root ..	1
Liquorice root	1
Cut these small and mix with—	
Juniper berries	1

Diuretic tea is so popular in Germany that a formula for it could no longer be delayed, so this is introduced. At the same time, species laxantes has had some Rochelle salt added to it.

Spiritus Aetheris Nitrosi—Versüßter Saltpetergeist.

The formula for sweet spirit of nitre, which was in previous Pharmacopœias, was of the most ancient description, and although the spirit cannot be called popular in the medical sense, the commission have thought fit to improve the formula. Previously the spirit was made by mixing 1 part of nitric acid with 4 of spirit, and, after twelve hours, distilling and purifying with calcined magnesia. Now 3 parts of nitric acid and 5 of spirit are mixed, allowed to stand for two days, then distilled, the distillate being received in a bottle containing 5 parts of spirit. Distillation is continued until vapour of nitric acid appears in the retort. The solution of the distillate is afterwards neutralised with calcined magnesia, and after twenty-four hours 8 parts are redistilled. The provision for ensuring the strength of this spirit is still insufficient, but we note an improvement in the iron test, which is now to be done with a concentrated solution of ferrous sulphate in hydrochloric acid.

Tinctura Digitalis—Fingerhuttinktur.

Instead of making this from 1 part of dried leaves and 10 of dilute spirit, it is in future to be made from 5 parts of fresh leaves and 6 parts of the stronger spirit, by maceration as in all other cases. It is thought by many that fresh digitalis is much more active than the dried drug.

Tinctura Strophanthi—Strophanthustinktur.

We are pleased to note that the commission have recovered the second "h" which belongs to strophanthus, but it is to be regretted that they have adopted a 1 in 10 tincture, 1 in 20 being the strength which Professor Fraser recommended, and which is universally employed in this country. In the formula the oil is extracted from the seed by pressure, and the powdered cake is then macerated in 10 parts of dilute spirit for the stipulated period and filtered free from fatty oil.

Unguentum Acidi Borici—Borsalbe.

One part of powdered boric acid mixed with 1 part of paraffin ointment.

Vinum Pepsini—Pepsinwein.

	Parts
Pepsin	24
Glycerine	20
Hydrochloric acid	3
Water	20

Macerate for eight days, shaking occasionally, and filter. To the filtrate add—

	Parts
Simple syrup	92
Tincture of orange	2
Sherry	839

Or as much as will make the whole weigh 1,000 parts.

This formula is much better than the one which has been discarded, and makes an elegant preparation.

MENSTRUA FOR TINCTURES, &c.

MUCH as has been done in regard to the relation of drugs to the menstrua employed in making galenical preparations, there still remains a great deal of ground to cover. The fact is, progress is slow, mainly because it is on the pharmaceutical side. We have plenty of physiological and therapeutical work in regard to scientific principles, but little or none at all with galenical preparations. Writing on the subject in the *American Druggist* recently, Mr. William Weber says that, with our present knowledge, a case may occur where a drug containing a resin supposed to be the active principle is exhausted with alcohol, while the real active principle, which happens to be less soluble in alcohol, is not represented in the liquid product at all. There certainly have been, and are still, some fluid extracts which do not possess the peculiar action of the drug. At the same time there are a good many things in the pharmacy of the subject that require attention. Thus the tests generally recommended to be observed in the exhaustion of drugs, such as absence of taste or colour in the last percolates, are not always accurate tests. It is said that the first 85 per cent. of percolate contains nearly the whole of the active principles of the drug; but this is not enough. What should be done is this: In starting we should first know how much of active substance the drug contains; when the full amount of the required or desired percolate has passed, we should continue the percolation with a little more menstruum, then examine this with our tests for more active constituents. The latter could easily be done, except in cases where our knowledge of active constituents is still deficient; or, until we possess a more complete knowledge, we could experiment with the same quantity of the crude powdered drug and the corresponding fluid extract or tincture, &c. In selecting, then, the best possible menstruum, we must know what we are aiming at. We must not only select one which is the solvent of the active ingredients, but one which acts as a complete solvent. At the same time the selected menstruum should dissolve as little as possible of the inert substances.

But the difficulty at present is to know what the best menstrua may be. The records regarding solubility are not as complete or uniform as we would desire; only the solubility in water and alcohol at different temperatures is generally given. Very seldom do we find a remark about the solubility in varying mixtures of alcohol and water; but this is just what we need most. Mr. Weber found that cocaine, 1 grain, did not dissolve in 4 oz. of water (although it is said that 1 part dissolves in 7 parts of water), nor in 2 oz. diluted alcohol. Atropine, $2\frac{3}{4}$ grains, easily dissolved in 1 oz. diluted alcohol. Caffeine, 10 6 grains, did not wholly dissolve in 1 oz. alcohol (1 : 75), the same quantity dissolved slowly in the U.S.P. menstruum, and almost rapidly in the menstruum proposed by Robbins—1 alcohol, 2 water. In the menstrua of alkaloidal preparations we find in some instances alcohol, as in fl. extr. and tincture of gelsemium. fl. extr. of belladonna root, tincture of physostigma. In others we find different percentages of alcohol or diluted alcohol, and in a number of cases it is proposed to lower the percentage of alcohol. This may be a desirable feature, if such a weaker menstruum accomplishes the same result as a stronger one, and does not load the finished product with undesirable substances.

Continuing, Mr. Weber proceeds to show that the phrase "until exhausted" is difficult, if possible, to attain under present circumstances, and the only thing that can be done is to experiment until we have very complete data regarding the character of the drug, and the potency and stability of the galenical preparations thereof.

In making preparations of leaves, *e.g.*, belladonna and coca, one is struck with the nauseating taste and odour of diluted alcohol products, and the contrast in colour is very striking; those made with alcohol are of a rich green, and those made with diluted alcohol of a more olive-green colour. This difference in colour should be a good criterion when we purchase a fluid extract to judge at a glance of the menstruum employed, unless it be artificially coloured.

In the manuals on pharmacy it is sometimes stated that "the value of diluted alcohol consists in its possessing the solvent powers of both water and alcohol," or "it has been supposed that the affinity for each other of the two ingredients in this liquid interferes somewhat with the solvent powers of each, &c.; but the reverse of this is the fact, and a mixture of alcohol and water is stated to be a better solvent of the resinous and extractive principles of plants than the same quantity of these two liquids separately employed." These are rather perplexing statements. If this was really the case, we need not use any alcohol of 94 per cent. at all, but could use with advantage, in all cases where alcohol would seem to be indicated, simply diluted alcohol, expecting the same result as if we had employed alcohol.

A few experiments on that point were made, and it was found in the case of fluid extract of coca that 2 fl. oz. of one with diluted alcohol caused each time a slight frontal headache, which was not caused by one made with alcohol; the exhilarating effect of the latter was also greater. This may partly be due to the volatile oil. Experiments also made with eucalyptus leaves showed the superiority of preparations made with strong alcohol, nevertheless a weaker alcoholic is recommended by some. We need not follow Mr. Weber further on his topic. It is one which naturally takes us into a train of thought, but we want more than that—good, honest work.

Medical Gleanings.

Nicotine-poisoning.

Mr. Stillingfleet Johnson, M.R.C.S., demonstrator of chemistry at King's College, describes in the *Lancet* of August 16 the case of nicotine-poisoning which we reported a few weeks ago. His note consists mainly of the record of his chemical experiments, and we mention it here as probably of interest to investigators.

Therapeutic Uses of Pumiline.

In a paper communicated to the Western Counties Therapeutical Society (*Homœo. Review* for July) Dr. Herbert Nankivell states that the value of pumiline in ordinary pharyngeal and laryngeal catarrhs is well marked directly the acute symptoms have passed. He gives particulars of severe and stubborn cases of bronchitis which were successfully treated with inhalations of the oil, and in the albuminuria of cyclists he has administered it with the result that the albumen has decreased $\frac{1}{12}$, $\frac{1}{20}$ or $\frac{1}{50}$, and the tendency to relapse has been distinctly lessened.

Capsules for Treatment of Gonorrhœa.

Dr. J. W. White, of the University of Pennsylvania, recommends the following mixture, in capsules, for the treatment of acute urethritis. In about two-thirds of his cases the discharge ceased within a week. In the majority it was necessary also to use an injection, and for this he recommends 2 grs. to 10 grs. of sulpho-carbolate of zinc in an ounce of a 10-volume peroxide of hydrogen solution:—

	Grains
Salol	3½
Oleoresin of cubebs	5
Copaiba balsam	10
Pepsin	1

Tellurate of Potassium in Night Sweats.

Dr. E. Neusser, of Vienna, has tried tellurate of potassium as a remedy for phthisis. He gave it in about fifty cases, and found that in by far the larger number one-third of a grain daily in the form of a pill was sufficient to arrest the night sweats, or at least to moderate them very perceptibly. In a few instances it was necessary to double this dose, and this was usually sufficient to bring about the desired result. No toxic symptoms were produced unless at least a grain was given daily for some considerable time, and then indigestion was set up. The garlic odour which tellurium imparts to the breath was the most disagreeable symptom manifested.

Pilocarpine in Belladonna-poisoning.

Dr. W. McGowan, of Maghera Dispensary, gives in the *Lancet* particulars of a case of poisoning with belladonna liniment. The patient, a woman of 37, took a tablespoonful of the liniment instead of a mixture. The doctor arrived four hours after and found her totally unconscious. He at once injected apomorphine, thereby inducing vomiting, and afterwards ⅓ grain of pilocarpine was injected and mustard applied to the calves of the legs. Soon thereafter the countenance began to assume its natural look, and within five hours the patient had recovered consciousness and was sitting up in bed, but was still delirious. On this the doctor injected more pilocarpine, and a rapid recovery ensued. This case shows how pilocarpine may be depended upon in atropine-poisoning. Here nearly all the liniment had passed out of the stomach—for the vomit had little odour of it—and the woman was fairly under the power of the poison.

Boracic Acid in Consumption.

Dr. Gaucher, a French physician, has for the last five years been studying the influence of boracic acid upon pulmonary tuberculosis, and his clinical results, the *Lancet* Paris correspondent states, show so far that the treatment has been found to bring about a notable diminution in the expectoration, which became more fluid and less purulent. The dose administered was 1 gramme, in divided doses, in the twenty-four hours. This, on the weight theory, must be considered insufficient. Taking the average weight of a patient to be 60 kilogrammes, and putting the limit of dose at 20 centigrammes for every 3 kilogrammes, 4 grammes of the acid should be given per day, the dose being, of course, graduated up to this amount. Boracic acid will be found, as a rule, to agree well with the stomach, and is easily taken; it is not caustic, has no disagreeable taste, and in some cases was found even to check the diarrhœa when this existed.

Treatment of Lupus Vulgaris.

Dr. Brooke, of Manchester, notes that there are two circumstances which induce patients suffering from lupus vulgaris to permit the growth to progress untreated. One its chronicity and painlessness, which tend to blind them to its disastrous consequences; the other, the imperfect results which result from scraping, when this has been followed by some indifferent ointment, under cover of which the disease has partly reformed. He has therefore found it useful to institute some preliminary treatment. As the avoidance of irritation is of the greatest importance in a prolonged treatment, some formula fulfilling this end must be employed. The one he finds best is as follows:—

Hydrarg. oleat. (2½-5 per cent.)	℥j.
Acidi salicylici	gr. 10-15.
Ichthyol.	♏xv.
Ol. lavandu'æ	q.s.

The keratolytic action of the salicylic acid must not be pushed. The ichthyol was added with the object of incorporating a mild antiphlogistic, and also as a means of toning down any excessive activity of the other drugs. Dr. Brooke had previously noticed this mitigating influence when ichthyol was added to biting or irritating substances. In using this formula it is better to begin with the lower doses and increase gradually. One important point which must be impressed on the patient is that the skin must not be broken by the application.

Lozenges for Dryness of the Throat and Mouth.

Dr. Solis-Cohen states that he has used with much satisfaction for the relief of the uncomfortable sensations of heat and dryness which characterise many acute and chronic affections of the mucous membrane of the mouth and throat, a lozenge made according to the following formula:—

Fluid extract of pyrethrum	⅔ minim
Pilocarpine hydrochlorate	$\frac{1}{32}$ grain
Pure extract of liquorice	2 grains
Powdered acacia	2 „
Glycerine	1 minim
Sugar, enough to make	20 grains

The lozenge is allowed to dissolve in the mouth, and one is used every two, three, or four hours, as may be indicated. Should more frequent use be necessary, the quantity of pilocarpine should be reduced. The addition of 2 grains of ammonium chloride will often be beneficial in subacute inflammatory conditions of the mucous lining of the respiratory tract; while in more chronic affections two or three minims of the oleoresin of cubebs will serve a good purpose.

Granules, Pills, and Cachets.

At a recent meeting of the Paris Société de Thérapeutique there was a discussion on medicinal granules, which was rather unfavourable to that form of medication. At the next meeting M. Cotillon protested against the conclusions which had been arrived at, maintaining that since granules have been made with solutions of the active substance they are unobjectionable and perfectly soluble. A very interesting discussion followed this, in the course of which M. Blondée recalled the fact that two years ago it was brought under notice that an infant had swallowed a whole bottleful of digitalin granules (1 millegramme) and was not a bit the worse of it. Something similar was alleged against pills, which are frequently so insoluble as to remain in the body, giving rise to symptoms not unlike biliary calculi. This was M. Créquy's experience, but it can be avoided in the case of sulphate of quinine, added M. Constantin Paul, by giving the drug in cachets, and preference should always be given to the more soluble salts.

THE PHARMACY ACT (IRELAND) AMENDMENT ACT, 1890.

THE Royal Assent to this measure was signified on Monday, August 18, the last day of the late Parliamentary session. We subjoin the exact text of the Act:—

ACT TO AMEND THE PHARMACY ACT (IRELAND), 1875.

Be it enacted by the Queen's Most Excellent Majesty, by and with the advice and consent of the Lords Spiritual and Temporal, and Commons, in this present Parliament assembled, and by the authority of the same as follows:—

Short Title.

1. This Act may be cited as the Pharmacy Act (Ireland), 1875, Amendment Act, 1890.

Extent of Act.

2. This Act shall apply to Ireland only.

Interpretation.

3. In this Act—

"The principal Act" means the Pharmacy Act (Ireland), 1875.

"The Society" means the Pharmaceutical Society of Ireland.

"The Council" means the Council of the Society.

"The Registrar" means the Registrar of the Society.

"The Treasurer" means the Treasurer of the Society.

"Poisons" mean all articles deemed to be poisons within the meaning of the Act thirty-three and thirty-four Victoria, chapter twenty-six, intituled "An Act to regulate the Sale of Poisons in Ireland."

Repeal of 38 *&* 39 *Vict., c.* 57, *s.* 15.

4. Section fifteen of the principal Act, and all other provisions of that Act empowering the Pharmaceutical Society of Ireland to create a grade of chemists and druggists legally qualified to dispense medical prescriptions, are hereby repealed.

Register of Chemists and Druggists and Registered Druggists.

5. The Registrar shall, in the manner by this Act provided, from time to time make out and maintain complete lists, to be called "the Register of chemists and druggists" and "the Register of registered druggists in Ireland," containing the names of all persons who have made application to be registered and are entitled to be registered as chemists and druggists and registered druggists respectively under the provisions of this Act, and the provisions of the principal Act with respect to the registers thereby authorised shall mutatis mutandis extend and apply to such registers, except so far as such provisions are altered by or are inconsistent with the provisions of this Act. All persons so registered shall be entitled to keep open shop for the sale, retailing, or mixing of poisons: Provided that nothing in this Act shall be deemed to confer on such persons any right to compound medical prescriptions.

Chemists or Druggists practising as such at passing of 38 *and* 39 *Vict., c.* 57, *entitled to be registered.*

6. Every chemist and druggist, or chemist, or druggist, who was practising as such in Ireland as a principal at the passing of the principal Act, shall be entitled to be registered as a chemist and druggist under this Act on complying with the following provisions:—

(1.) He shall, within a year from the passing of this Act, make application in writing to the Registrar to be registered under the provisions of this Act.

(2.) Such application shall be accompanied by a statutory declaration of the applicant in the form set out in Schedule A. to this Act, or to the like effect: Provided that it shall be lawful for the Council to require from any such applicant such evidence as they may think fit of the truth of the statements contained in the statutory declaration so made by him, and to require such other confirmatory evidence as they shall think sufficient.

(3.) He shall pay to the Treasurer of the Society a fee of one guinea.

(4.) Notwithstanding the provisions of section thirty-one of the principal Act, no person shall be entitled to keep open shop for the selling, retailing, or mixing of poisons by reason that he was a chemist and druggist practising as such in Ireland on his own account at the time of the passing of the principal Act, unless he shall be registered as a chemist and druggist under this Act.

Chemists or Druggists in business before passing of Act entitled to be registered.

7. Every chemist and druggist, or chemist or druggist, who has gone into business as a principal after the passing of the principal Act and before the passing of this Act, shall be entitled to be registered as a druggist on complying with the following provisions:—

(1.) He shall, on or before the first day of June one thousand eight hundred and ninety-one, make application in writing to the Registrar to be registered under the provisions of this Act.

(2.) Such application shall be accompanied by a statutory declaration of the applicant in the form set out in Schedule B. to this Act, or to the like effect.

(3.) He shall be examined with respect to his knowledge of reading and writing, elementary arithmetic, and the appearances of the poisons, drugs, and chemical salts in common use, and the Act of the session of the thirty-third and thirty-fourth years of the reign of Her present Majesty, chapter twenty-six, and shall obtain from the examiner or examiners appointed by the Lord Lieutenant of Ireland to hold such examination a certificate of having satisfactorily passed the same.

(4.) The Lord Lieutenant in Council shall appoint examiners to conduct the examinations prescribed by this section for applicants, and shall fix the fees to be paid to such examiners and to the Society respectively in respect of such examinations, and the examinations shall be held in Dublin and at such other places as the Lord Lieutenant in Council shall consider necessary.

(5.) Every person who went into business as a chemist and druggist as a principal between the passing of the principal Act and the passing of this Act, and who has styled himself chemist and druggist, and has complied with the provisions of this section, and passed the examination under this section, shall be permitted to retain the title of chemist and druggist.

(6.) Every person who having styled himself as a chemist and druggist shall claim to retain the title of chemist and druggist under the provisions of this section shall, at the time of his application to be registered, make a statutory declaration stating when and where he was in business as a chemist and druggist styling himself as such.

(7.) It shall be lawful for the Council to require from any such applicant such evidence as they may think fit of the truth of the statements contained in the statutory declaration so made by him, and to require such other confirmatory evidence as they shall think sufficient.

Registration of Registered Druggists.

8. Every person who shall duly have completed, or shall duly complete, a term of service as apprentice or assistant of not less than four years to a pharmaceutical chemist, or to a licentiate apothecary, or to a person or persons who shall have become, or who had he or they survived or continued in business would have been entitled to become, a registered chemist and druggist, or registered druggist, under this Act, shall be entitled to be registered as a registered druggist under this Act on complying with the following provisions:—

(1.) He shall make application in writing to the Registrar to be registered under the provisions of this Act.

(2.) Such application shall be accompanied by a statutory declaration of the applicant in the form set out in Schedule C. to this Act, or to the like effect, with an additional declaration in the form set out in Schedule D., or to the like effect.

(3.) He shall be examined with respect to his knowledge of English orthography and composition, arithmetic, and the weights and measures of the British Pharmacopœia, the appearance and properties of the various drugs and chemicals in general use, and the Act of the session of the thirty-third and thirty-fourth years of the reign of her present Majesty, chapter twenty-six, and shall obtain from the examiners appointed by the Council to hold such examination a certificate of having satisfactorily passed the same.

(4.) He shall pay to the Treasurer of the Society, on presenting himself for such examination, a fee of two guineas, and a further fee of two guineas on being registered.

Provided that if he shall fail to satisfy the examiner, he may present himself for subsequent examinations on paying the examiner's fees.

Provided also that evidence shall be adduced to the satisfaction of the Council that the applicant has completed a term of apprenticeship such as hereinbefore described; and provided also that if the term of apprenticeship be continued after the expiration of one year from the passing of this Act it shall not entitle the applicant to present himself for examination, unless the term shall have been completed with a pharmaceutical chemist, a licentiate apothecary, or a registered chemist and druggist, or registered druggist under this Act.

Examinations of Intending Druggists.

9. It shall be the duty of the Society to provide for examinations being held at which applicants for registration as registered druggists may present themselves for examination. Such examinations shall be held at not greater intervals than the examinations of persons desirous of being registered as pharmaceutical chemists under the principal Act, and shall be held at Dublin, Belfast, Cork, and such other places as may be convenient.

Provided that it shall not be compulsory on the Society to cause any such examinations to be held outside Dublin unless at least twelve persons make application for examination thereat.

Apprentices having passed Examination entitled to Registration.

10. Every person who shall have served an apprenticeship of four years with a pharmaceutical chemist, a licentiate apothecary, a registered chemist and druggist, or a registered druggist shall be entitled to present himself for examination under this Act, and shall be entitled on passing his examination to be registered as a registered druggist under this Act, and every person who shall have served such apprenticeship to a registered chemist and druggist, or a registered druggist not being a pharmaceutical chemist, and who shall comply with the regulations of the Society in force for the time being, and in addition shall have served an assistantship of two years to either a pharmaceutical chemist or a licentiate of the Apothecaries' Hall keeping open shop, shall be entitled to present himself for examination under the principal Act as a pharmaceutical chemist, and shall be entitled on passing his examination to be registered as a pharmaceutical chemist.

Provisions of 38 *and* 39 *Vict. c.* 57 *as to Examinations to extend to Examinations authorised by this Act.*

11. The provisions of the principal Act with respect to the examinations therein mentioned shall extend and apply to the examinations by this Act authorised, except so far as such provisions are altered by or are inconsistent with the provisions of this Act.

Persons who may be elected Associates of the Pharmaceutical Society.

12.—(1.) Within three months after the passing of this Act, the Society shall, subject to the provisions of the principal Act, make regulations for the election of registered chemists and druggists and registered druggists as associates of the Society under the title of associate druggists.

(2) Every person who shall be registered under this Act as a chemist and druggist or registered druggist shall be qualified to be elected an associate druggist, subject to any regulations made in pursuance of the principal Act and this Act, and every person so elected and continuing as such associate shall have the same privileges of voting for members of the Council and of attending all meetings of the Society and of voting thereat and otherwise taking part in the proceedings of such meetings as members of the Society, and shall be qualified to be elected and when elected to act as a member of the Council of the Society. Provided always that such associates contribute to the funds of the Society the same annual subscriptions as members contribute for the time being under the regulations thereof, and provided also that such associate druggists shall not style themselves associates of the Pharmaceutical Society, and any druggist making use of such title shall be liable to have his name erased from the Register of Associate Druggists.

First Election of Representatives of Chemists and Druggists to Council.

13. At a date to be fixed by the Council, but not later than the fifteenth day of January one thousand eight hundred and ninety-one, an election shall be held of seven persons (who shall be registered as druggists or chemists and druggists) to be additional members of the Council of the Society, and such election shall be held in like manner in all respects as an election of members of the Council of the Society in the place of retiring members held under the principal Act: Provided that the persons entitled to vote at the election of such seven members on the said Council shall be persons who shall be then registered as chemists and druggists, or registered druggists. And every such person so voting at such election shall pay to the Society a fee of one guinea as an annual subscription in respect of the year 1891.

Election of new Council in 1891.

14. At the annual election in October one thousand eight hundred and ninety-one, under the principal Act and this Act, the Council of the Society shall go out of office, and a new Council shall be elected consisting of twenty-one members, not more than seven of whom shall be associate druggists, and the right of voting for members of council at this and all subsequent elections shall be common to both members of the Pharmaceutical Society and associate druggists. Provided nevertheless that the president and vice-president shall remain in office to conduct the election of October one thousand eight hundred and ninety-one, and declare the votes, but not longer unless duly elected, and the retiring rotation of members shall be determined in the same manner as is provided by section nine of the principal Act. Provided also that in the event of the death or resignation of the said president and vice-president, or either of them, or their inability or unwillingness to conduct such election, it shall be lawful for the Lord Lieutenant to nominate and appoint some other person to conduct such election who shall have the same power with respect thereto as if he had been elected chairman of the meeting.

No Person to Assume Title of Registered Druggist, or Chemist and Druggist, or Sell Poisons, unless Registered.

15. From and after the passing of this Act it shall be unlawful for any person to assume, and from and after the first day of January, 1892, it shall be unlawful for any person to use, the title of a registered druggist or chemist and druggist in any part of Ireland, or to sell poisons, unless such person shall be registered as a chemist and druggist or registered druggist, under this Act, and any person acting in contravention of this enactment shall for every such offence be liable to pay a penalty not exceeding five pounds.

Printed Copies of Registers to be sent to Inspectors of Weights and Measures, who shall report any Person infringing Act.

16. In the month of January in each year, the registrar shall send printed copies of the register of pharmaceutical chemists and of the register of chemists and druggists and of the register of registered druggists, to the inspector of weights and measures in each constabulary district in Ireland, and it shall be the duty of such inspector to report to the Council any offences against the provisions of the principal Act or this Act or the Act thirty-three and thirty-four Victoria, chapter twenty-six, entitled "An Act to

Regulate the Sale of Poisons in Ireland," committed within his district; and one-third of every sum of money recovered as a penalty against any person so offending shall be paid to any such inspector who shall be the means of bringing such person to justice.

Shop for Sale of Poisons, or Compounding Medical Prescriptions, to be Personally Managed by Owner or Qualified Assistant.

17. Any person or persons lawfully keeping open shop for selling, retailing, or mixing poisons shall personally manage and conduct such shop and the retailing and mixing of poisons therein, or shall employ for the purposes aforesaid, as an assistant or manager in such shop, a duly registered chemist and druggist, or registered druggist, or pharmaceutical chemist or licentiate apothecary; and such person or persons lawfully keeping open shop as aforesaid shall, for the purposes of this Act and of the principal Act, be held to be the retailer and compounder of poisons aforesaid therein; and every person or persons lawfully keeping open shop for selling and retailing poisons, and dispensing and compounding medical prescriptions, shall personally manage and conduct such shop and the retailing, dispensing, and compounding of poisons and medical prescriptions therein, or shall employ for the purposes aforesaid, as assistant or manager in such shop, a duly qualified pharmaceutical chemist or licentiate apothecary; and such person or persons lawfully keeping open shop, as aforesaid shall, for the purposes of this Act and of the principal Act, be held to be the retailer and compounder of poisons or medical prescriptions as aforesaid therein; and any person or persons acting in contravention of this enactment shall for every such offence be liable to pay a penalty not exceeding five pounds.

Registrar may require Name of Proprietor of Premises where Poisons sold, or Medical Prescriptions compounded, to be furnished to him.

18. It shall be lawful for the registrar at any time to write a letter addressed to the proprietor or proprietors of any premises where open shop is kept for the selling, retailing, dispensing, or mixing of poisons or compounding of medical prescriptions (such letter to be delivered on the premises, or to be forwarded by post as a registered letter according to the post-office regulations for the time being in force), requiring such proprietor or proprietors, within seventeen days from the delivery of such letter, to furnish in writing to the registrar a statement of the name and address of the *bonâ-fide* proprietor or proprietors of such shop, and if such proprietor or proprietors do not personally manage and conduct such shop, the name of the duly qualified manager or assistant managing or conducting the same, and the description of his qualification; and in case such proprietor or proprietors neglect to furnish such information to the registrar within the time aforesaid, he or they and each of them shall be liable to pay a penalty not exceeding one pound for every day during which such default shall continue; and so long as such default shall continue it shall be unlawful for any person to sell or retail, dispense or mix poisons or compound medical prescriptions on such premises, and every person or persons acting in contravention of this enactment shall for every such offence be liable to pay a penalty not exceeding five pounds, unless he or they shall prove to the satisfaction of the court or justices having jurisdiction in the case that he or they did not know of such default. Every person who shall make a false statement in writing with intent to mislead in reply to any inquiry addressed to him by the registrar under this Act, shall be held to have made a false declaration, and shall be liable to the penalty provided under section 28 of the principal Act.

Examinations for Assistants to Pharmaceutical Chemists.

19. The Council may cause examinations to be held at such times and in such manner as may be prescribed by them from time to time for the purpose of examining assistants to pharmaceutical chemists, and such assistants as shall pass such examination shall be competent to transact the business of a licentiate of the Pharmaceutical Society in his temporary absence, but shall not be entitled to conduct or manage a business or to keep open shop on their own account.

Amendment of 38 and 39 Vic. c. 57, s. 11.

20. Section 11 of the principal Act shall be read and have effect as if the words "the second monthly meeting" were substituted for the words "ten days" in that section.

Application of Moneys paid to Treasurer.

21. All sums payable to the treasurer under this Act shall be applied by him under the direction of the Council to the purposes of the principal Act and this Act.

Penalties.

22. All penalties recoverable under this Act shall be recoverable and applied in the same manner as penalties recoverable under the principal Act.

Construction of Act.

23. This Act and the principal Act shall be read together and construed as one Act.

SCHEDULE A.

FORM OF DECLARATION.

To the Registrar of the
Pharmaceutical Society of Ireland.

I, , residing at , in the county of , hereby declare that I was in business as a chemist and druggist on my own account [*or* that I was in business in the years], at , in the county of , on or before the eleventh day of August one thousand eight hundred and seventy-five.

(Signed)

Dated this day of , 18 .

SCHEDULE B.

FORM OF DECLARATION.

To the Registrar of the
Pharmaceutical Society of Ireland.

I, , residing at , in the county of , hereby declare that I was in business as a chemist and druggist [*or* chemist *or* druggist], as a principal, in the years , at , in the county of .

(Signed)

Dated this day of , 18 .

SCHEDULE C.

FORM OF DECLARATION.

To the Registrar of the
Pharmaceutical Society of Ireland.

I, , residing at , in the county of , hereby declare that I have completed a full term of service as apprentice [*or* assistant] of years to a pharmaceutical chemist [*or* a licentiate apothecary, *or* a registered chemist and druggist *or* a registered druggist who has been *or* would have been entitled to be duly registered under the Pharmacy Act (Ireland), 1875, Amendment Act, 1890].

(Signed)

Dated this day of , 18 .

SCHEDULE D.

FORM OF DECLARATION.

To the Registrar of the
Pharmaceutical Society of Ireland.

I, , residing at , in the county of , hereby declare that has completed with me a full term of years as apprentice [*or* assistant], ending , 18 .

(Signed)

Dated day of , 18 .

CRUDE COCAINE is made in two places in Peru, one factory being at Callao and another at Lima.

REGISTERED "SANITAS" TRADE MARK.
IS THE IDEAL AND MOST RELIABLE
DISINFECTANT,
And is most used in Antiseptic Surgery.
LARGEST SALE IN THE WORLD.
The Trade, in their own interest, should stock all our "SANITAS" Fluids, Oil, Powder, Soaps, Toilet, and Veterinary Preparations.

KINGZETT'S BACTERICIDES
AND
PATENT PRESERVED PEROXIDE OF HYDROGEN
THE SANITAS CO., BETHNAL GREEN, E.

SHOW CARDS, 24×17 or 17×12,
Free to any Address in the United Kingdom.

See First Page, facing inside of front of Cover, in the first issue of the month for latest particulars.

Noakes' Tins for Druggists' use.
Write for Price List No. 14.
B. NOAKES & CO
Dockley Road, Bermondsey, London

UMNEY'S CINCHONA ERGOT CASCARA MALT &c
PRICES CURRENT ON APPLICATION.
FLUID EXTRACTS.
WRIGHT LAYMAN & UMNEY. SOUTHWARK. LONDON.

CHASSAING & CO.'S PEPSIN, PEPTONE, PANCREATINE,
6 Avenue Victoria, PARIS.
Sole Agents for the United Kingdom, Fuerst Brothers 17 Philpot Lane, London, E.C.
(See Advert., Second No. of this Journal each month.)

SILICATED CARBON
FILTERS
PATENT SELF-AERATING
MOVEABLE BLOCKS
WORKS, BATTERSEA LONDON. S.W.

MUMFORD'S
FARRINGDON ROAD, LONDON, E.C.
PURE CRUSHED LINSEED,
17/- CWT.,
Or in 28-lb. and 56-lb. Bags, 18/- Cwt.;
PURE STARCH POWDER,
In 56-lb. bags, 26/-,
Or in 7-lb., 14-lb., and 28-lb. Bags, 28/- Cwt.,
CARRIAGE PAID [2]
to Railway Stations in England, or half to stations in Scotland, Ireland and Wales, on parcels of a total weight of not less than 1 Cwt.

CATALOGUES AND PRICE LISTS ILLUSTRATED
ADVERT.T BLOCKS ENGRAVED
TO ADVERTISERS
IN BEST STYLE AT MODERATE COST
W. BARKER & SON.
MONUMENT CHAMBERS.
KING WILLIAM ST. LONDON. E.C.

JEYES' CREOLIN
AND
CHOLERA.
See Page 27 this issue.

PATENTS AND TRADE MARKS.
W. P. THOMPSON & CO., F.C.S., M.'s I.M.E., &c.,
6 Lord Street, LIVERPOOL; 6 Bank Street, MANCHESTER; Angel Row, NOTTINGHAM; and 323 High Holborn, LONDON, W.C., Chemical and General Patent and Trade Mark Agents.
MANUALS OF INSTRUCTIONS GRATIS.

Fletchers' Concentrated Liquors
"MANIFESTLY VERY CONVENIENT."—British Medical Journal.

EDITORIAL NOTES.

THE SESSION OF 1890.

THE stormy Parliamentary Session of 1890, which flickered so peacefully into history on Monday last, has not been an uneventful one in connection with pharmacy. The Irish Pharmacy Act of 1890 reconstitutes the trade in the sister island, and its passage through the two Houses of Parliament might furnish several topics for consideration on this side of St. George's Channel. The most noteworthy lesson to learn is, perhaps, that Ireland has representatives on both sides of the House, who recognise that they owe a serious duty to their constituents. It is right to acknowledge that a very fair number of members of both Houses took the trouble to acquaint themselves with the not very inviting details of a business which offered to none of them any opportunity for personal display or party gain. We doubt whether the pharmacists of Great Britain could secure a

BURROUGHS WELLCOME & Co.

much attention from among their representatives, five times as numerous. The effect of this Act is so perfectly summarised in the special article on another page, by Mr. J. E. Brunker, who has had so large a share in its preparation, that we pass it for the present.

Parliament has not been asked to interest itself in the concerns of British pharmacy this year, the Bill prepared by the Pharmaceutical Council for submission to the Legislature having failed to secure adequate support from chemists themselves. Once in the course of the Session the Council showed its teeth, and the Government surrendered with an astonishing promptitude. This was in reference to a clause contained in an Inland Revenue Bill, by which it was proposed, in effect, that methylated spirit should be sold by retail in wine-bottles only. In consequence of the protest of the Pharmaceutical Society and its secretaries, this proposal was withdrawn. It is questionable whether the Government plan would not have been beneficial to retailers. Certainly the gain or loss resulting from it could hardly have been more than trifling. The imposition by the Chancellor of the Exchequer of an additional 6*d.* per proof gallon on spirit, involving, as we estimate, an unfair incidence of taxation on chemists to the amount of between 30,000*l.* and 40,000*l.* per annum, was passed without the shadow of an official objection from pharmaceutical authorities.

By the Infectious Diseases (Prevention) Act additional powers have been conferred on local authorities. Under certain circumstances, dairies may be inspected and closed; premises, bedding, and public conveyances may be compulsorily disinfected, and dead bodies may be dealt with. A new Contagious Diseases (Animals) Act extends the powers of the Board of Agriculture so as to enable it to deal with animals affected with pleuro-pneumonia in the same summary way as those suffering from glanders and certain other diseases may now be treated. In a lengthy Act the scattered statutes affecting the control of lunatics have been collected in a Lunacy Consolidation Act.

Commercial law has been discussed under numerous Bills, the most important of which, the Bankruptcy Bill, introduced by Sir A. Rollit, has become law in a modified form. This Act gives power to bankruptcy courts to deal with greater severity with fraudulent debtors, and reintroduces, with some qualifications, the principle of the Act of 1869 requiring a bankrupt either to pay 10*s.* in the pound or to hypothecate some of his future earnings, or to have his discharge suspended for at least two years. The important proposal, however, that creditors for 20*l.* and upwards instead of 50*l.*, the limit fixed by the 1883 Act, may petition in bankruptcy has not been adopted. An Act modifying the Deeds of Arrangement Act so as to provide for the local registration of deeds of arrangement in Ireland has been passed; and a new Bills of Sale Act has been passed to simply declare that instruments hypothecating imported goods between ex-shipment and delivery are not to be deemed bills of sale: this will remove a difficulty which has occurred in commercial circles. The law in regard to partnerships has also been advantageously consolidated. This Act, which is sold by the Queen's printers for 2*d.*, should be obtained by everyone interested in a partnership.

The much-debated Directors' Liability Bill is intended to render directors and promoters liable for untrue statements published by them, unless they can show that they had reasonable ground for believing the statements to be true. The Bill passed by the House of Commons would have imposed liability on directors for "misleading" statements. This very vague expression, however, has been properly deleted by the Upper House. A Companies Winding-up Bill, simplifying procedure, has also been passed.

Mr. Blundell Maple has connected with Sir John Lubbock in this Session with the object of limiting the shop-hours of salaried assistants, but neither has succeeded in securing much attention to his measure. The Shop-hours Regulation Act, however, of 1886, which would have expired at the end of this year, has been renewed for another year by the Expiring Laws Continuance Act.

The record of the results of the Parliamentary work of this year concerning business matters, thus summarised, seems but a meagre residue of the oceans of debate only lately ended. But it must not be forgotten that the best treatment commerce can hope for is to be let alone. The Legislature should be only as the policeman who keeps the ring clear; and in an ideal state of society, where everyone is honest, the demand for new statutes ought to cease altogether. We have not arrived at that condition yet; but past experience does not lead us to mourn over a Session as wasted because it has been less prolific than usual in new or heroic legislation.

CONFERENCE SUBJECTS.

SUPERSTITIOUS members of the Pharmaceutical Conference must have had a shock when they noticed by the preliminary list published last week that the papers numbered thirteen. Of the thirteen, three papers may be ranked as pharmaceutical, three as pharmacological, and seven as chemical. We have already suggested that pure pharmacy should have greater prominence at the Conference, as that department may most profitably be encouraged for the interest and benefit of members generally. Whether this can be done by communications from members or by discussions arranged by the Executive is a question which should not require much consideration. A trial might be made of the latter method, selecting, say, a topic for each day, and devoting not more than an hour to it, allowing each speaker from three to five minutes for an expression of his opinion. Amongst topics which would be most serviceable to pharmacy are those relating to pharmacopœial standards, the compilers of the Pharmacopœia now placing great weight on a consensus of opinion regarding any matter pertaining to it, Professor Attfield even inviting it. With the object of assisting the Pharmacopœia authorities, the Conference Executive might entrust some of its members to open discussions on such subjects as:

1. How often should the British Pharmacopœia be revised?
2. Should rudimentary standards (such as colour, specific gravity, &c.) be specified for official galenical preparations (fluid extracts, tinctures, &c.)?
3. How can the pharmacist aid in proving the value of new remedies?

There should be no lack of subjects which could profitably be discussed, and as these should deal with matters which do not require special research—business experience alone giving individuals the qualification to speak—the results would most likely justify the experiment.

According to custom, we now proceed to give some notes on the various subjects which have been announced; and, dealing first with those under "Pharmacy," we take Mr. J. F. Burnett's subject as one which is likely to be of general interest. About three years ago Mr. Burnett, in a note read before the Chemists' Assistants' Association, referred to the success which he had had in preserving certain dispensing solutions, as well as fresh infusions, with chloroform. It is a long time since the antiseptic properties of chloroform were proposed to be utilised in pharmacy: the

Chloroform as a Preservative.

first one to mention the matter was, if we remember rightly, Mr. J. B. Barnes, who in 1874 showed that 5 minims to 8 oz. of fresh infusion, and a single minim to an ounce of mucilage, act as an efficient preservative. Since then Salkowski has proved that chloroform retards all fermentative processes which depend upon micro-organisms; and Kingzett has also corroborated the statement that the agent is an antiseptic. Quite recently Mr. H. W. Jones, in a note in this journal, testified to the efficiency of chloroform in preserving hypodermic injections—indeed, the application of preparations of chloroform as preservatives is by no means limited in pharmacy, and Mr. Burnett's paper may assist in making the fact better known. A subject which has often been spoken about, but in regard to which comparatively little systematic work has been done, is that taken up by Mr. R. Wright—viz., "The Solvent Action of Alcohol of different Strengths upon some of the Drugs used in making Pharmacopœial Tinctures." Hitherto we have gone upon general principles in this matter: if a drug is resinous or oily, rectified spirit is taken as the most suitable menstruum, and proof spirit has to serve for everything else. This is a mischievous principle, since it involves a waste of spirit in many instances, and in others a loss of active principle owing to the menstruum not being the most suitable. For example, rectified spirit was used for tincture of nux vomica, until it was shown that a menstruum containing more water has a greater solvent power on the active principles of the drug. There are other drugs which could be placed in the same category, while there are some which do not require alcohol at all for extraction, it being a preservative in these cases, and in all we require such experiment as Mr. Wright appears to be engaged in before modification of the official formulæ can be ventured upon.

Menstrua for Tinctures.

Another subject which pharmacists will be glad to discuss is that provided by Messrs. Martindale and Salter—"Hydrargyri Iodidum Viride." We have never been able to understand why this mercurial was omitted from the present edition of the British Pharmacopœia. It is true that, as prepared by the B.P. method, it was a very unstable compound, and that, probably, was the reason why it was so extensively used, the mercurial action being mild, and associated with more of the influence of iodide than mercuric iodide can possibly give. Instead of removing the salt from the Pharmacopœia, the authorities might have given place to a pill so made as to ensure the stability of the compound, or the salt prepared by precipitation (which is said to be perfectly stable) might have been tried.

Hydrarg. Iod. Viride.

One of the features of last year's Conference was the paper by Mr. Siebold on "The Presence of Arsenic in Glycerine." Since then he has supplemented his communication, and it is satisfactory to know that the glycerine of pharmacy is above suspicion so far as arsenical contamination is concerned. Still, we anticipate that the paper by Dr. Lewkowitsch, who is connected with a soap-works in Leeds, on glycerine will not overlook what was said last year, for the glycerine from soap-lees at that time got several hard knocks. It would be interesting to pharmacists to hear from a soap specialist a concise statement of the present condition of glycerine-recovery from soap-waste. There have been many processes patented, but outsiders hear little as to their success.

Glycerine.

Messrs. Millard and Stark's "Comparative Examination of the Tests for Methylated Spirit" should be a useful contribution, considering the large number of tests which have been proposed from time to time. Methylated spirit is a complicated mixture, the wood spirit used for it containing acetone, aldehyd, allyl alcohol, and many other bodies whose characteristics are so obnoxiously prominent as to have led to the selection of wood spirit as the liquid most suitable for denaturising alcohol. Nevertheless, when methylated spirit passes through a still, or is deodorised or converted into compounds which are not permitted by law, the older tests, such as Ure's alkaline and Miller's silver tests, become very unreliable. The Government chemists rely upon Riche and Bardy's test (the conversion of the methyl-alcohol into methyl-violet), which is an exceedingly delicate one, but so elaborate as to be unsuitable for pharmaceutical purposes. The Dutch Pharmacopœia tests are good. One of these (used for rectified spirit and sweet spirit of nitre) depends upon the well-known iodoform reaction for acetone, and the other is used for ether, the reagents being mercuric chloride and barium hydrate. As showing how difficult it is for analysts to devise tests for every sophistication, we may say that it is now possible to make absolutely pure ether from methylated spirit.

Tests for Methylated Spirit.

Dr. J. C. Thresh has promised a paper on "The Estimation of Nitrites in Drinking-water." This is a subject which he has recently given considerable attention to, his position as a medical officer of health giving him excellent opportunities for solving difficulties attached to the subject. Already in a communication to the Chemical Society he has shown how nitrites may be estimated by the iodine method, working in an atmosphere of hydrogen or coal gas, and he has a similar process for spirit of nitrous ether. A second local communication is promised on alkaline sulphites, Mr. C. H. Bottomley, of Yorkshire College, being the contributor. The instability of the normal sulphites, and the reputed stability of acid sulphites, especially the meta-bisulphites, form a topic which should interest pharmacists, especially those who are suppliers of photographic chemicals. Sulphites are not now used much in medicine. What promises from its title to be an interesting and useful paper is that by Mr. John Hodgkin, on "The Constitution of Synthetic Remedies." Owing to the names of most new remedies being descriptive of their action rather than of their composition, their true relation is apt to be lost sight of by dispensers, although manufacturers keep it so well in mind that the number of such remedies increases to an alarming extent, the choice, however, being little better than that between six and half-a-dozen. Mr. Hodgkin will doubtless make this clear in his communication. There are other subjects still to be commented upon; but we propose to refer to these in another article, along with the following papers which are also promised:—"Note on a Sample of Adulterated Saffron," by W. Kirkby, F.L.S.; "Note on the Comparative Medicinal Values of the Three Buchus," by C. J. S. Thompson; "Notes on some Alkaloidal Tinctures," by E. H. Farr; "The Alkaloidal Values of Annual and Biennial Henbanes," by A. W. Gerrard, F.C.S.

Nitrites in Water.

Alkaline Sulphites.

Synthetic Remedies.

THE SPIRIT TAX.

We have recently published several communications which held out some hope to those interested that the fiscal authorities are prepared to consider favourably any practicable suggestions for the remission, in the case of spirit used for medicinal purposes, of the extra sixpence which was placed on the tax of that commodity. It has been expressly admitted that this additional duty, which was granted for a

specific purpose, was intended to be drawn from persons directly interested and indirectly benefited. It was well understood that publicans not bought out would get an advantage from the reduction of competition which the tax was to provide for, and, moreover, it was clear that they would be able, by slightly enhancing the price of their spirituous liquors, to recoup themselves and transfer the tax to their customers. The retailer of medicines was not thought of; and even when it was pointed out in this journal that the drug trade would suffer by the increased duty, few imagined to what extent, for there were no figures to go upon, and calculations were necessarily more or less vague. Now, however, it is possible to put the case for the drug trade—the case too, we may say, for doctors who dispense their own medicines—with more definiteness. There is little reason for writing and speaking about this matter if the trade throughout the country, and especially local associations, do not take it up in a hearty manner; and since the Pharmaceutical Council, with its matured experience of parliamentary work, persistently neglects it, there is all the more reason for energetic action on the part of local associations in anticipation of the Budget of 1891.

The consumption of spirit for medicinal purposes cannot be ascertained with certainty from any statistics. In a rough estimate based on the consumption of a few retail pharmacists, we said some time ago that the sixpence extra on spirit would cost druggists 50,000*l.* a year. That meant an annual consumption of 2,000,000 proof gallons of spirit for medicinal purposes: and this is exactly the quantity which an Inland Revenue official has stated as the probable consumption. Another official, in a recent inquiry, reckoned that something over a million gallons were required annually for medicines. It seems reasonable to assume from all this that medicine-men will have to contribute between 30,000*l.* and 40,000*l.* this year to the common treasury over and above their own fair share of the taxation of the country. If the Chancellor of the Exchequer had fixed the income tax of chemists at one penny in the pound higher than that charged to the rest of the nation, the unfairness of the burden would have been apparent to everybody—even to members of Parliament. In the form of indirect taxation its unjust incidence is not so apparent. Mr. Goschen has promised to give favourable consideration to any workable scheme which may be proposed for refunding the extra duty. Perhaps the most feasible suggestion yet made is that in which repayment of the surplus tax is to be made upon the basis of permits. Were some such scheme adopted, retail compounders of medicine would be careful to preserve the permits for pure spirit, and could claim rebatement from local Inland Revenue authorities a reasonable time before the end of the fiscal year. In the case of wholesale dealers and manufacturers who also sell pure spirit to the trade, claim could be made on the amount of spirit stocked, less the amount shown by permits to have been sold. The balance would fairly represent the amount used for compounding medicines, and, abatement being allowed on this, the prices of tinctures, &c., would return to their old figures.

We do not expect that this or any other scheme would be free from objection, especially to the Government officials; but it ought to be said that they are most willing to consider proposals, and the success which has attended the efforts of wholesale druggists to get a rebatement on exported spirituous medicines should encourage retailers to seriously grapple with the injustice to which they are subject.

COMMENTARY.

Coloured Sugar.—At the last meeting of the Society of Public Analysts, Mr. Charles E. Cassal described the "yellow crystal" sugar which is now in the market, and which is well known to be artificially coloured. The colour is characteristic, and, if the dye is present in unusually small amount, is best seen when about 25 to 30 grammes of the sugar are just moistened with hydrochloric acid in a deep conical porcelain dish. On standing, the mixture becomes of a dark, reddish-brown colour. Acetic acid has a hardly perceptible effect, but appears to slightly intensify the orange colour of the crystals. Sulphuric acid produces the same effect as hydrochloric acid, but the subsequent changes of colour are not properly perceptible, owing to the charring that takes place. These reactions are very similar to those obtained with certain of the so-called tropæolins.

Was it a Patent Medicine?—The Pharmaceutical Council can hardly ignore the statement of Thomas Wright, grocer, draper, and patent-medicine dealer, of Caythorpe, near Grantham, whose evidence given at an inquest which we report in another column is concise and frank. Mr. Wright said that the person whose death was being investigated, and who, it is probable, had deliberately committed suicide, came to his shop and asked if he sold laudanum, as he (deceased) wished to mix some oils. Wright said he had some "narcotic mixture" "which would answer the same purpose." It was labelled "Poison." Deceased bought a bottle and paid 1*s.* 1½*d.* for it. He subsequently killed himself with it. We understand from this that Mr. Wright is selling an article which is either laudanum simply, or is very nearly the same thing; he puts a patent-medicine stamp on it, and thinks he thereby brings it within the exemptions of the 16th section of the Pharmacy Act; he labels it "Poison," and thereby protects himself against police prosecution under the 17th section. The Pharmaceutical Council alone can prosecute in this case, and if they do not do so they are neglecting to afford the public that protection which the Legislature designed. Mr. Wright would probably plead the 16th section. If he would do so, and if the county court judge would support his view, they would do the trade a great service, by enabling the Society to obtain an intepretation in the High Court of the exact meaning of the term "patent medicine" as used in the Pharmacy Act.

Cevadilla Alkaloids.—Mr. E. Merck has isolated two new bases from cevadilla seeds, and is now engaged in their examination. Both alkaloids are crystallisable and yield crystalline salts. One alkaloid is in white crystals soluble in chloroform and alcohol, but less soluble in ether. The crystals run together at about 230° C., but are only fully melted at about 240° C. The nitrate of the same crystallises very well, and dissolves only with great difficulty in water and alcohol. The second alkaloid crystallises from ether in soft needles, which are freely soluble in alcohol and chloroform, but not so easily in ether. Its melting-point is 214–215° C. The nitrate of this alkaloid crystallises well, dissolves fairly easily in water, but only with difficulty in alcohol. Neither of the alkaloids is sternutatory, so that they differ from veratrine, and they are not precipitated by ammonia in the cold, although on heating the ammoniacal solution the free bases are precipitated in an amorphous form.

The Ageing of Spirits.—Dr. Bell's evidence before the Spirits Commission has not been received by analytical chemists with much favour. Mr. A. H. Allen is amongst those who do not agree with Dr. Bell's theory, and in an

article in the *Wine Trade Review* Mr. Allen goes fully into the chemistry of the subject, dealing especially with the formation of fragrant ethers of the higher alcohols, and inferring that, "given time and a certain contact with air, the constituents of fusel oil will undergo change into various fragrant and delicious ethers, to the formation of which the bouquet and flavour of matured wines and spirits is largely due." The figures which Dr. Bell submitted to the Commission "mean that the amylic alcohol is slightly increased by age rather than diminished, and if, as is commonly held, the deleterious effects of whisky are due to its presence, it necessarily follows that new whisky is to be preferred, so far as its wholesomeness is concerned, to the matured spirit!" . . . But "there is good reason to believe," Mr. Allen goes on to say, "that Dr. Bell's figures lump together the unchanged and the etherified amylic alcohol under the name of fusel oil, and that his conclusions are vitiated accordingly. By a suitable modification of the ordinary processes of determining fusel oil he believes it is perfectly possible to distinguish the unchanged amyl alcohol from the harmless products of ageing, and he is instituting a series of experiments with a view of obtaining information in this direction." We may point out in regard to this matter that Dr. Bell, in his evidence, was particularly careful to say that his figures were not to be taken as meaning fusel oil; but this was not clearly brought out in the published reports, and the consequence was that such an inference as Mr. Allen's—viz, that fusel oil increases with age—was perfectly fair. This appeared to us such an unlikely circumstance that we made special inquiry at Somerset House, and were informed, as reported in our issue of July 26, that "Dr. Bell's evidence was directed to show that the higher alcohols remain unaffected by age, while the lower-boiling bodies undergo etherification, thereby adding to the amount of the oxidation bodies present in the spirit."

Drawback on Methylated Spirits is no longer allowed, according to clause 31 of the Customs and Inland Revenue Act of the past session. Until recently rectifiers used only duty-paid spirit for methylation, while distillers and persons licensed to methylate were compelled to use duty-free spirit. Now they will all be on the same level. The real cause of the change is traceable to the increasing importation of foreign spirit, which is now almost solely used for methylation. This spirit is imported in casks which cannot be accurately gauged, so that there is always a surplus of duty-free spirit. Licensed methylators could not use this spirit for any other purpose than methylating, since the penalties for such traffic are so heavy that few would care to risk detection. With rectifiers the case was different, since they could easily place the surplus in their stills, while they had all the duty which they had paid on the foreign spirit taken out for methylation refunded. The consequence was that the rectifier-methylator was always able to offer methylated spirit at an abnormally low price, and at the same time pocket a good premium. Under the new Act rectifiers are now excluded, and in future the only makers of the spirit will be distillers and licensed methylators.

Shop Hours and Half-holidays.—A correspondent suggests that for the convenience of commercial travellers we should collect from all parts of the country the notifications of the hours and days adopted by chemists for the half-holidays now in vogue, and publish a complete list periodically. We shall be glad to attempt this, and if local secretaries will be good enough to send us postcards giving this information, and also the usual hour for closing in the evening, we will begin to issue a list. This will serve as a lesson to places where the innovation has not been established.

THE IRISH PHARMACY ACT AMENDMENT ACT.

By J. E. Brunker, M.A.

In order that we might submit to the trade an authoritative conspectus of the modifications which the new Irish Pharmacy Act has made in the law regulating the business in Ireland, we asked the ex-President of the Pharmaceutical Society of Ireland to prepare for us such a memorandum. The valuable elucidatory notes which follow are the result. —Ed. *C. & D.*

The closing hours of the Parliamentary Session of 1890 have been of interest to pharmacists in this country, as they have seen the Amendment of the Pharmacy Act (Ireland), 1875, passed into law.

The Act, which is not a perfect one, has, however, many good and useful features, and, if it has done nothing else, has removed the doubts which rested upon the position of some hundreds of men who were serving the public throughout the country.

It will be interesting to compare the Act, which is printed *in extenso* elsewhere, with the Bill which was drawn up in 1889 and agreed upon by representatives of the rival interests concerned, which the Pharmaceutical Society of Ireland would none of, and to see how closely the lines then laid down have been followed.

The rejection of that Bill has had no more permanent result than the intensification of party feeling, the unnecessary expenditure of a large sum of money which might have been turned to more profitable use, and the inevitable small inconsistencies which follow from the carrying of a contentious measure of such a technical character through the Houses of Parliament.

Shortly, the Act differs from the draft Bill of 1889—firstly, in requiring druggists who have gone into business since 1875 to pass a very trifling examination. The principle of this change is sound and good, and it could not be resisted by the promoters of the Bill in the face of the evidence which some of their representatives gave before the Select Committee of the House of Lords.

Secondly, the annual fee proposed to be paid by persons who desired to keep open shop under the Act has been eliminated. Had the Pharmaceutical Society earlier recognised the inevitable, this fee might still have formed a feature of the Act. Both parties wished for it, but in the midst of the storm of contending elements it was easy for such an uncompromising opponent of the principle involved as Dr. Kenny to place an insuperable barrier in the way.

With these two exceptions, the Bill as it stands is practically identical with the one which was threshed out last year.

The changes affecting the law of pharmacy in Ireland effected by the Act are, first and foremost, the recognition and perpetuation of a grade of druggists who may sell and mix scheduled poisons (sections 6, 7, 8 and 9), but not dispense medical prescriptions.

It is useless at the present day to recapitulate the arguments in favour of this arrangement. There is no doubt that Sir M. Hicks-Beach and others who were responsible for the principal Act had in their minds such a division of the trade; and it was probably owing to insufficient acquaintance with the actual state of things in the country that the clauses were so loosely drawn as to defeat their intention.

If the first Council of the Society did not as a body recognise the defects of the Bill, their successors so long ago as 1879 clearly saw what was required, and down to 1884 did their best to induce the Government to give effect to their desire for an amending Act.

The Bill carried through the House of Lords in 1888 was drawn with a view to carry out the wishes of the Council as then constituted; but the interests of the druggists were too

vitally concerned to admit of the proposals of the Society being accepted by the House of Commons.

The persons who will be entitled to register under the Act are divided into three classes—

1. Any chemist or druggist (section 6) who was practising as such on his own account prior to 1875 may be registered as a "*chemist and druggist.*"

2. Any chemist or druggist (section 7) who has gone into business as a principal since 1875 may be registered as a "*registered druggist*, on passing a very modified examination which is to be conducted by examiners appointed by the Lord Lieutenant in Council. Those under this classification who have been styling themselves *chemists and druggists* may, on giving satisfactory proof to that effect, continue to use the title for life.

3. A person who has served four years (section 10) to a registered druggist, pharmaceutical chemist, or apothecary keeping open shop, may be registered as a "*registered druggist*" on passing a sufficient literary and technical examination.

The restoration of the title "registered druggist" during the passing of the Bill through the House of Lords has removed what might have been a cause of confusion in the future in the working of the Act.

The functions of the chemist and druggist of Great Britain would be quite different from those of persons bearing the same name in Ireland. The anomaly remains to a limited extent in the case of those whose vested rights have been protected, but they will in course of time drop out.

The further possibility of confusion has been removed by the repeal, under section 4, of the powers which the Pharmaceutical Society possessed of creating a grade of dispensing chemists and druggists.

Section 10 makes provision for the advancement of chemists and druggists to the higher grade of pharmaceutical chemist.

Section 12 gives to the Pharmaceutical Society a much wider and more democratic basis than it has hitherto had; since every registered druggist who cares to pay his annual guinea has been given as much voice in the affairs of the Society as members of the higher grade.

It is rather a pity that the clause has not been allowed to stand in its original form, as drafted by the Select Committee of the House of Lords in 1888. The title "registered associate" and the penal sub-section 2 take away a good deal of the grace of a popular concession such as, in principle, the clause is as a whole. Perhaps, however, the authors of this sub-section have not scored as heavily as their opponents, who have taken care, by sub-section 1, that the Council shall within three months make the regulations necessary to give effect to the section.

Section 13 provides for an *ad interim* representation of chemists and druggists upon the Council of the Society to enable them to take part in drawing up regulations for and conducting examinations of the new grade; the right to vote being made contingent on contributing to the Society's funds.

Section 14 provides that in October, 1891, full effect shall be given to the new constitution of the Society, members and associates voting as a united body for an entirely new Council, of whom not more than seven shall be registered druggists or chemists and druggists.

In this clause, again, precautions are taken against any possible lapse, on the part of the Council or its officers, in carrying out the provisions of the section.

Clause 15 clearly defines that none can be a seller of poisons unless registered.

Clause 16 affords very useful machinery for the discovery of persons infringing the principal Act or amending Act.

In every constabulary district in Ireland an officer is appointed, usually an officer of the Royal Irish Constabulary, who acts as inspector of weights and measures, and in course of his duty has to visit every shop in his district. This officer is given a direct personal interest in the detection of offenders.

Clause 17 forms a very important portion of the Act. It enforces the necessity of every shop kept open for the sale of poisons or compounding medical prescriptions being under the personal management of a duly qualified proprietor, or a manager similarly qualified. It does more than this, however, inasmuch as it defines who the *seller* shall be, and he shall be the qualified proprietor.

The beaten track of legal interpretation in Great Britain is not followed, and it remains to be proved how far the working of this section may differ from the decisions laid down under the Act of 1868.

Is it not possible that corporations keeping open shop for retailing poisons or dispensing prescriptions in Ireland are under this section the *sellers*, and as such subject to all the penal consequences of clause 16 of this Act, and clause 30 of the principal Act?

Section 18 is based upon clause 10 of the Bill drafted by the Pharmaceutical Society of Great Britain in 1883. It gives very sweeping inquisitorial powers to the Society, to enable it to identify owners and detect offenders.

Section 19 has already been referred to in your pages as an anomaly and inconsistency. Fortunately, it is only permissive, and as it does not define exactly the privileges or responsibilities of the certificated assistant, nor impose any obligation upon the principal to employ such an assistant, it will probably lie in abeyance. If availed of to any extent, it can only have the effect of restricting the number of those who will seek the licence of pharmaceutical chemist.

The remaining clauses are purely executive.

The net results of the Bill may be summarised thus: The Society will be raised from its present position, essentially weak in numbers and finances, to a much stronger one, with a large *clientèle*, a capital which must necessarily accrue from the large number of registrations which may be expected, and an enhanced income from the associates, who will naturally desire to be in a position to influence the choice of councillors.

A public want will be supplied, and a body of men who from the necessity of things have come into existence will have a recognised legal status.

The field from which the higher grade of chemists can be recruited will be largely widened, while the increased funds and influence of the Society will place within its reach great possibilities for the advancement of education, and the consequent raising of the status of its licentiates.

If the representatives of the two rival factions will now let bygones be bygones, and only concern themselves with setting up the necessary machinery for putting the Act in motion, no one can say that the time spent in threshing out the details of the measure has been thrown away.

Trade Notes.

JEYES' DISINFECTANTS COMPANY have received an order for 15,000 kilos. of their fluid for the Egyptian Government, which is ordered to be used in the proportion of 6 to 1000 in watering the streets of Alexandria in view of the cholera.

MESSRS. WOLSTENCROFT & CO., of 28 Ludgate Hill, E.C., the makers of "Barton's exterminator," inform us that that this rat and mice poison fulfils all the requirements which a correspondent has mentioned in regard to the extermination of rats at Birmingham. It kills and completely dries up rats and mice; yet if cats and dogs eat it they are not poisoned, but the exterminator acts upon them as an emetic. The speciality is put up in the form of a paste, there being one kind for rats and another for mice.

SHORT HOURS.—This is a burning topic in the United States at present, just as it is here. It will have been gathered from paragraphs which we have recently published that assistants are at the bottom of the movement. In giving them counsel the *American Druggist* says, amongst other wise things: "A phase of the question seems to have escaped attention—that the labour of professional men is not regulated by hours, as in the case of artisans and tradespeople. It would be a strange thing indeed to find a lawyer, editor, clergyman, architect, or doctor who worked only for a certain number of hours in each day—on the contrary, their work begins as early as possible, and continues oftentimes well into the night. It is not a question of a limit for working-time so much as a limit of working-capacity. This must be also true of the dispensing pharmacist."

Personalities.

PROFESSOR ATTFIELD has been appointed Dean of the School of Pharmacy.

MR. JOHN GREEN, of Christchurch, has sold his business to Mr. Henry Green, of Liverpool.

MR. C. F. RIDEAL is to undertake the editorship of a magazine and book review, which is to be published on August 30, at one penny weekly.

MR. JAMES JONES, late manager for the Southern Drug Company (Limited), has taken a shop at 118 Christchurch Road, and is about to open it as "The Bournemouth Drug and Dispensing Stores."

MR. CLAYTON FRENCH, of Philadelphia, whose death we reported last week, has left a fortune of over $2,000,000, which goes to his wife and family, his sons taking the profits of his share in the business of French, Richards & Co.

MR. GEORGE WEDDELL, of Newcastle-on-Tyne, is, as we have previously mentioned, preparing for publication a manuscript volume of Apothecaries' Lore and Household Recipes, and we are told that research in the Bodleian Library and the British Museum has shown that the manuscript in his possession is a genuine production of the Fairfax family dating from the early part of the seventeenth century. Other and earlier writings are to be included in the volume. The book will not be ready before Christmas, and to subscribers before the end of September the price will be 12*s.* 6*d.*

MAJOR CLIFFORD PROBYN, L.C.C. (of Messrs. Hooper & Co., Pall Mall), was on Saturday last entertained at Simpson's, Strand, and was presented by his friends and constituents of the Strand division of Westminster with a solid silver dessert, tea, and coffee service, valued at 300 guineas. Dr. D. Nicoll, who presided, referred in highly complimentary terms to the success which had followed Major Clifford Probyn's efforts on behalf of the community. In the event of the retirement of Mr. W. H. Smith from representation of this Metropolitan division, Major Probyn will be put forward as his successor.

IN the results of the London University examinations this month two names come together rather curiously under the intermediate science (inorganic chemistry) section. The only names of those in the first class are Mr. R. H. Bremridge, of Magdalen College, Oxford, and Mr. Edmund White, pharmaceutist of St. Thomas's Hospital. Mr. Bremridge takes the exhibition, and Mr. White has the distinction of having taken the number of marks qualifying for the exhibition. At the same time Mr. Charles E. Boucher, the Bell scholar of last session, passed in the first division of the intermediate examination in science, and Mr. Richard H. Norman, another Bell scholar, now studying at St. Mary's Hospital, passed in the first division of the preliminary scientific (M.B.) examination.

OVERDOSE OF MORPHIA.—Dr. J. W. Phillips, of Cowbridge, aged 59 years, died on Monday last—it is believed from an overdose of morphia.

THE BRITISH DENTAL ASSOCIATION opened its annual meeting at Exeter on Thursday. The total membership of the Association was reported as 769, and its assets are 762*l.* It was resolved to hold the meeting next year in London.

SYMPATHY NOT WANTED.—Countryman (to dentist): "The tooth next to that 'un aches too, doc." Dentist: "Yes, it aches in sympathy." Countryman: "Yank it out; durn sech sympathy!"

CHARGE OF FORGERY.—A man named John Charles Sherridan was committed for trial from Bow Street Police Court, on Thursday, on a charge of forging a cheque for 432*l.*, and stealing four cheques belonging to Messrs. Forbes, Abbot, and Lennard, manufacturing chemists. The prisoner had been in the employment of an accountant who audited the books of that firm, and the theory of the prosecution was, that in the course of auditing he had abstracted the cheques.

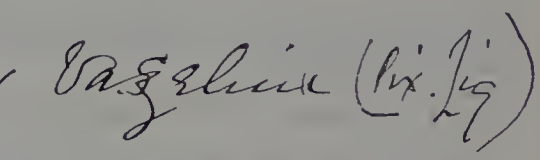
AT THE COUNTER.

"ACRES OF FORTY," "Clorodolime," and "Cox's borax plaster" are selections from a Bedford list of orders received.

SCENE: An Oban Pharmacy. Enter Old Celt.—"I'm waanting a character the day, Mr. ———." Chemist: A character! A character for what?" Celt (with emphasis): "A character for taking the water off a man." Catheter supplied.

LADY (entering drug-store): "Can I get a postage-stamp here?" Gentlemanly Assistant: "Sorry, but we are all out of postage-stamps. Perhaps aromatic sticking plaster might serve your purpose just as well. It's very highly recommended. If that wouldn't do, here's a nice porous article; just read a few of these testimonials, please. No? not what you want? Very sorry our postage-stamps are all out. Nothing else? Cosmetics? toilet articles? soda, cigars?—oh! beg pardon, of course you don't want any cigars. Wonder what made her flaunt out the door in that way; something I said must have offended her. Funny things, these women."

MR. T. M. CLAGUE (Newcastle-on-Tyne) sends us a manuscript order, of which a *fac simile* is subjoined, received from a local doctor:—



It was discovered that the words in parentheses meant that the gentleman wanted the vaseline to be supplied in a chip-box. Who says that Latin should no longer form a part of the medical curriculum?

A PHARMACEUTICAL FRIEND supplies the following gems from the "Land of bulls":—

"A pennyworth of pneumonia," asked for during the recent wet weather. Ammonia was supplied.

"A box of bronchial truncheons," requested by a constabulary man. Bronchial troches were given to him.

"Perpetual pills" are commonly demanded by provincial visitors to Dublin.

Objecting last week to pay 1*s.* 8*d.* for an 8-oz. bottle of medicine, the irate customer described its value as "1*s.* 7*d.* worth of water and a pennyworth of drugs."

GROCER'S CHEMISTRY.—A few days ago a lady went into a grocer's at Southampton, and asked if they kept "milk of sulphur," and was rather surprised by the clever young man in the shop stating, "Oh, yes; shall we send you a pint or a quart?"

HISTORY REPEATS ITSELF.—At Walsall, a week or two ago, one of the pharmacists received from a brother chip the following:—"Please supply sodii chloridi ℥j," which was done "statim," and charged accordingly, with a smile.

"PLEASE let bearer know if there is anything you can give him to make me taller. Such as iron tonic or some other thing." That was a note presented at a large chemist's shop in Glasgow. The assistant, with a refined wit, which was probably wasted on his correspondent, replied, "Nothing in stock, but might get some of 'Berry's Drops' from England."

AROMATIC SPIRIT OF AMMONIA, U.S.P., contains oil of pimento, which has the effect of causing the spirit to become quite dark in the course of a few weeks.

Practical Notes and Formulæ.

Dentists' Modelling-wax.

	Parts.
French chalk	14
Gum kowrie	8
Stearin	4

Melt the stearin first, add the gum kowrie; then the chalk, not too much at a time, and stir constantly. Colour with carmine, and pour it into saucers to form thin cakes.

Clear Mucilage.

A correspondent of the *Pharmaceutische Zeitung*, referring to the difficulty of keeping gum-arabic mucilage clear and sweet during the warm weather, states that a little ammonia generally suffices to counteract the acidity, but this is objectionable because of the darkening of the colour which is apt to ensue. Of all neutralising agents there is none better than lime, and it will be found to be advantageous to make the mucilage with a mixture of 1 part of lime-water and 4 parts of plain water.

Insoluble New Remedies in Mixtures.

The Continental pharmaceutical papers have recently been discussing the manner in which insoluble substances, such as phenacetin, should be dispensed when ordered in aqueous mixtures. Some are of opinion that the best plan is to dissolve the substance in alcohol, and add to the aqueous fluid, or use a little heat, and thereby effect solution. But it is pointed out that both methods are objectionable, especially if the substances be of a crystalline nature, as the material crystallises out. It is far better to rub the substance down to fine powder with its own weight of sugar or acacia, and then add the water or other vehicle. There is little question, we may add, about this being the best way; indeed, it ought to be a rule in dispensing, "Never attempt to dissolve an insoluble substance; suspend it."

Benzine Jelly,

For removing grease spots, may be made, according to the *Pharmaceutical Era*, according to any one of the following:—

1.	Tincture of soap bark	12 fl. drs.
	Benzine to make	8 fl. ozs.

Mix and shake for half-an-hour, then allow to stand twelve hours to solidify.

2.	Infusion of soap bark (20 per cent.)	4 fl. drs.
	Benzine	2 fl. ozs.

Proceed as above.

3. 120 grammes of white soap are dissolved in 180 grammes of hot water in a litre bottle, 30 grammes of ammonia added. The solution is then made up to three-fourths of the bottle by the addition of water, and the whole shaken up. A teaspoonful of this mixture is placed in a bottle holding 8 oz., and mixed therein with some benzine, and afterward the bottle is filled with benzine under protracted shaking.

Cold Cream from Cotton-seed Oil.

At the recent meeting of the Pennsylvania Pharmaceutical Association, Mr. W. L. Cliffe submitted the following formula for making cold cream from cotton-seed oil:—

Cotton-seed oil	15 oz.
Spermaceti	3½ „
White wax	3½ „
Oil of lavender	12 drops
Rose water	7 oz.

Cotton-seed oil being somewhat of a drying nature, it was at the meeting questioned whether it was as well adapted for cold cream as the non-drying almond oil. Attention was called to the fact that the expressed oils of peach and apricot kernels are sometimes sold as almond oil, and that they are closely analogous to the latter, but may be distinguished from it by producing a reddish colour on being warmed with diluted nitric acid.

Blaud's Pill Mass.

German pharmacists go upon a different principle in making Blaud's pills from what we do in this country, but they appear now to have come round to the same way of thinking as to the condition in which the iron should exist in the pill. The following formula according to *Phar. Zeit.* gives a plastic and beautifully green mass, ʒix. of which make 100 pil. Blaudi majores, ʒvi. 100 pil. Blaudi minores:—

Sulphate of iron in fine powder	60 drachms
Bicarbonate of soda „	30 „
Carbonate of potash „	30 „
White sugar	20 „
Glycerine	8 „
Water	about 30 „

Take all these ingredients by weight, mix them in a tared iron basin, and place on a water-bath. Stir constantly, and when the carbonic-acid gas begins to come off add 3 oz. of rectified spirit, and stir well until all the gas has come off and the mass is of a soft consistency. Then note its weight, and make up to 150 drachms with a mixture of powdered gum arabic 1 part, and powdered althea 2 parts. Beat into a mass in an iron mortar, adding, if necessary, a sufficiency of glycerine 1 part and water 2 parts to make a proper mass.

Easton's Elixir.

This agreeable substitute for Easton's syrup is much used in the United States, but is somewhat difficult to produce in a satisfactory manner. Many formulæ have been proposed and some officialised, and according to Mr. Frank Edel (*Registered Pharmacist*) a first-class and permanent preparation can be made by the following formula:—

Quinine sulphate	123 grains
Ferric phosphate (U.S.P., 1880)	256 „
Strychnine sulphate	1¼ „
Rectified spirit	2 oz.
Glycerine	2 „
Simple syrup	2 „
Distilled water	1 „
Aromatic elixir, q.s.	16 „

Dissolve the strychnine in the spirit; then add the quinine. Mix the glycerine and syrup, and heat; when hot add to the solution of alkaloids. Continue heating gradually, until the quinine is dissolved; then add enough elixir to make 15 oz. Dissolve the iron in the water by aid of heat, and add to the solution of alkaloids; shake thoroughly, allow to stand three or four hours, and filter.

The elixir made by this formula has been tested for two months, is elegant, and of the same quinine strength as that of the National Formulary, to which it is vastly superior, and being prepared from the sulphate, instead of muriate, is cheaper and more convenient.

Boiled Linseed Oil.

An investigation into the changes which occur in making boiled linseed oil has taken Mr. F. H. Thorp well into the action of the various substances which are added to the oil, and he has been led to conclude, as reported in the *Technology Quarterly*, that lead dryers always give the oil a deep colour, which shows more or less in the film. Zinc dryers do not appear to act on the oil to any degree, as oils thus prepared dry slowly and do not give very hard films. Manganese dryers give the best results in all respects. Litharge gives the best results of the lead dryers, the oil being quick drying and the film hard, and if not overheated the oil is but moderately coloured. Of the zinc salts, the acetate seemed to give the best result, although the borate and citrate were nearly as good. The borate and acetate of manganese gave the best results. The acetate requires careful use, for, if heated much above 230°, it gives a deep colour to the oil, owing apparently to the formation of tar. The borate undoubtedly gives the best boiled oil for all purposes. The chlorides, nitrates, and sulphates do not make good dryers. The first two have too violent an action on the oil, while the last are very difficult to decompose, requiring a high temperature. There appears to be no advantage in the use of formates, citrates, or tartrates.

Black Wax used by cabinet-makers for imparting a dull glassy polish to woodwork has been found to be composed of 85 per cent. of crude cerasin and 15 per cent. of carnauba wax. The substance is dissolved in turpentine before use.

BRITISH AND FOREIGN CONSULS' REPORTS.

BULGARIA.

Rose Gardens. The rose-gardens in Bulgaria occupy a total area of 5,050 acres.

Mineral Waters. Mineral and thermal springs are found in almost every part of Bulgaria, the best known being at Sofia and the neighbourhood, at Hissar and Bania, Philippopolis, and at Ligia, Bourgas. These waters are largely charged with ferruginous and sulphurous substances, and are found very effective by their numerous visitors for medical purposes in cases of rheumatic and other disorders. So far, the installation has left much to be desired; but last year the municipality of Sofia invited tenders for the construction of spacious and commodious baths at the capital, and a plan has been approved and will be executed. The cost of the buildings will be 80,000*l.*, and when these are completed they should prove a considerable attraction to Sofia. It may be not over sanguine to predict that a time will come when Sofia will be the health resort of the Balkan States, for which, indeed, it is well adapted by its excellent climate and elevated position.

FRANCE.

The coming Tariff Revision. The summary of the answers given by French chambers and syndicates of commerce to the question issued by order of the Government, asking them to state their views on the approaching expiration of the commercial treaties (THE CHEMIST AND DRUGGIST, April 19), has recently been issued. It is remarkable inasmuch as it shows that however strong the current of protectionism may be in Parliament, it is tempered amongst the manufacturers and merchants by a lively sense of the advantages of moderation.

Chemicals. As regards the chemical trade, Lyons, Paris, and Calais are unanimous in advocating free-trade in raw materials required for the manufacture of chemicals. All chemicals, they maintain, used in the production of textiles should be imported at low rates, because high duties would be prejudicial to the industries in which such materials are used. If existing rates are to be changed, they should be reduced rather than increased. If increased, the new charge can only be compensated by export drawbacks, which are not easily applied, and necessarily lead to fraud.

The duties on soda, salts, acids, and methyl-alcohol should be reduced, and free import be allowed in favour of agriculture to pyrites, phosphates, nitrate of potash, sulphate of ammonia, and chloride of potash.

All produce obtained from coal-tar by distillation should remain free from duty—viz., oils and essences, benzene, benzol, naphthalin, &c. But chemicals obtained from the products of the distillation of coal-tar, such as nitro-benzene, nitro-toluene, aniline, &c., should be charged at the rate of 15f. per 100 kilos., or about 5 to 6 per cent. *ad valorem*

All colouring matters derived from coal-tar should be allow to enter at a reduction of duty of 50 per cent.

On certain articles of interest to British trade the demands of French makers are protective. Marseilles, Nancy, and Avesnes want an additional duty on caustic soda. Paris would be content with the duty of 8f., levied under the present general tariff. But the Syndical Chamber of Paris Dyers and Cleaners advocates a lower charge of 3f. and 5f. per 100 kilos. in the minimum and maximum tariffs respectively. Dieppe asks for a duty of 1f. 50c. on nitrates of potash and soda; but Granville, Nantes, Orleans, Clermont Ferrand, and others would keep nitrate of soda on the free list, and Paris thinks that a new duty would have to be compensated by a drawback.

Sulphate of copper now pays a duty of 3f. per 100 kilos. It is in great demand for dressing vines. The Chamber of Le Mans would raise the tariff, and the Syndical Chamber of Chemical Industries of Paris wants an increase of 65 per cent., but the Syndical Chamber of Dyers and Cleaners claims entire freedom for the article. Calais dyers object to any imposition of duty on aniline.

Paris wishes to put oxalic acid into the list of free imports; Arras, Marseilles, and Nimes that the duty of 10f. on stearic acid should be increased by 10 to 50 per cent.; Vienne and Paris propose a duty of 16f. per 100 kilos. The dyers of Paris ask for the repeal of the present duty of 10f. on chromate of potash and the suppression of the duty on glycerine. But the merchant brokers of Paris would only admit raw glycerine free, charging 12f. to 15f. per 100 kilos. on distilled and dynamite glycerine.

Nice Olive Oil. The Nice olives, unlike those of Provence, grow upon umbrageous trees almost as tall as small oaks, and produce an excellent and abundant oil from a diminutive dark berry. The crushing-mills, waterworked, are, however, still universally primitive in construction and method, but little changed, indeed, since the time of the Romans, and naturally the oil is therefore wasteful and costly in production. Near Florence the very same quality of berry is made to produce a superior oil, that commands a better price in the foreign markets than the Nice oil, simply owing to improved machinery. The Florentine mills are worked by an English company, and pay a good dividend.

GUATEMALA.

The Drug Trade. This Central American Republic of Guatemala had a prosperous year in 1889. Its trade increased considerably, and the imports of drugs alone rose from 15,171*l.* in 1888 to 20,155*l.* The drugs mostly come from the United States. The prosperity of the country is ascribed to the advance in the price of coffee, the principal product. The result of the participation of Guatemala in the Paris Exhibition is that the importations from France have more than doubled.

JAPAN.

Drugs in Yokohama. The importation of drugs and chemicals into Yokohama is an increasing trade, large quantities of chemicals being imported for manufacturing purposes, such as paper and match making, glass-works, and other industries.

The Japanese Government are themselves manufacturers of caustic and other sodas, and of sulphuric acid, which is shipped in considerable amounts to the China market, or sold to private Japanese dealers.

Medicines for pharmaceutical purposes are also made on a large scale at Japanese establishments generally reported to be furnished with Government loans. Some importers complain of the continual difficulties, almost prohibitory, raised in regard to the sale of foreign drugs and medicines, these being constantly rejected by the Government analysts, as not being up to the standard of the Japanese Pharmacopœia; and it appears, from a recent Government notification to Japanese traders, that this condition will in future be strictly enforced. The standard is higher than that of England, and necessitates the preparations submitted to the test being chemically or absolutely pure and free from inherent impurity, such as bismuth without a trace of arsenic. Under the Japanese Pharmacopœia, iodide of potassium is required to be 97 per cent. pure; in the British it is 95 per cent. This staple article, when pure, turns a yellow colour; but it is then apt to be rejected by the trader. The whole question, being of great importance to Japanese consumers and foreign importers, is entitled to earnest attention.

The imports of medicinal drugs and chemicals into Yokohama in 1889 were valued at 106,559*l.*, against 129,914*l.* in 1888.

TURKEY IN ASIA.

Liquorice Root. Liquorice root continues to be gathered in the plains of Antioch, Killis, and Marash, and after being pressed by steam-power at Alexandretta is forwarded to the United States by sailing-vessels. The cost of transport by camel from the plains to Alexandretta averaged in 1889 28*s.* per ton, the freight from Alexandretta to New York being 26*s.* In other words, it costs more to transport 1 ton of root a distance of a few hours, than a journey of 80 to 120 days by sailing-vessel. In 1887 it was 32*s.* against 13*s.* On account of these high charges for transport, the American importers are now procuring the bulk of their supplies from Batoum, which means a loss of some 36,000*l.* to the poorest class of the inhabitants of Asiatic Turkey—namely, the peasants.

Trade Report.

Notice to Retail Buyers:—It should be remembered that the quotations in this section are invariably the lowest net cash prices actually paid for large quantities in bulk. In many cases allowances have to be added before ordinary prices can be ascertained. Frequently goods must be picked and sorted to suit the demands of the retail trade, causing much labour and the accumulation of rejections, not all of which are suitable, even for manufacturing purposes.

It should also be recollected that for many articles the range of quality is very wide.

42 CANNON STREET, E.C., August 21.

THERE has been a fair amount of business done in the market this week, and several articles have sold at decidedly higher rates; amongst these we must class ipecacuanha, Cape aloes, and shellac; while senna, cajaput-oil, opium, and several other articles are decidedly firmer. The feature of the week is the phenomenal speculation in quinine, whereby the price of certain Continental brands has been raised a penny or two, and transactions amounting to nearly half a million ounces are reported to have been made. The drug sales this week were by no means heavy, and presented no unusual feature.

THE ALKALI UNION.—Papers all over the country are interesting themselves in the attempts being made to form a combination of the Leblanc alkali works. It has been announced several times this week that the preliminary arrangements are completed. We believe this is scarcely correct even yet, though success seems extremely probable. A well-informed Liverpool correspondent tells us of two firms of importance in the district who, it is rumoured, refuse to join, but it is understood that their resistance will not prevent the union. The total capital which is said at Liverpool to be the probable figure is 6,500,000*l.*, not 8,000,000*l.* as was anticipated. The possible formidable rivalry of the great ammonia-process works of Brunner, Mond & Co. is said to be "scotched" by the consent of this firm to "work amicably."

ALTERATION IN THE 'CHANGE HOUR.—At the drug auctions to-day Mr. Figgis, referring to this matter, said he hoped the alteration would suit the convenience of members of the trade. The new hour of meeting—namely, from 3.30 to 4 P.M.—would be tried for six months; and if at the end of that term members wished to make any further suggestions, he invited them to make such through him. The other trades would be only too glad to keep to the time as fixed.

AMSTERDAM CINCHONA SALES.—The analyses of the bark to be offered next Thursday have now been published, and the manufacturing bark contains about 13½ tons sulphate of quinine, or 4 22 per cent. on the average. About 4 tons contain 0 1 per cent. sulphate of quinine; 37, 1·2; 67, 2 3; 70, 3 4; 114, 4 5; 33, 5 6; 13, 6·7; 10, 7·8; and 10, 8 9 per cent.

ACID (CITRIC).—There is no change to report in regard to this acid, and comparatively little business is doing at the last quoted price.

ACID (OXALIC).—The last quotation still rules, but little is offering at that.

ACID (TARTARIC).—Firm; English being quoted 1*s.* 3*d.*, and foreign 1*s.* 2½*d.* to 1*s.* 2¾*d.*

ALBUMEN.—Thirteen cases of light amber-coloured stuff, free from ammoniacal odour and generally translucent, offered, and bought in at 1*s.* 6*d.*

ALOES.—There was a very good supply in the sales, Curaçao and Barbadoes sorts totalling up to 554 packages, East Indian 28, and Cape 65 packages. Much of this supply was good aloes, especially the livery Curaçao in gourds, about half of which would turn out well on maturing; but there was a small supply of extremely yellow Curaçao which looked very suspicious. The East Indian was a poor lot on the whole, but fully a half of the Cape aloes was of superior quality. Of the 65 packages of the last-named, 55 were sold at an advance of 5*d.* to 7*d.*; clean fracture, clear and hard aloes at 23*s.* to 24*s.* 6*d.*, and over-heated parcels at 21*s.* to 22*s.* Some cases of imperfectly dried sold at 11*s.* 6*d.* for dark, and 18*s.* for translucent brown, part hard. *Curaçao*: 110 boxes, clear dark and capey, sold at from 14*s.* 6*d.* to 15*s.*, and of over-heated aloes 119 boxes were disposed of at prices ranging from 9*s.* to 12*s.*; these were somewhat off colour, the cheapest lots being all soft. Gourds: 60 parcels of good colour were sold at 22*s.*, and some softer sorts of the same shape brought 15*s.*; nearly a dozen boxes of broken gourds, mixed as to quality and proportion of soluble matter, sold at 10*s.* Of *East Indian* sorts, in skins, four lots of good quality Zanzibar sold at 77*s.* 6*d.*, and two lots, which will require a good deal of maturing, brought 55*s.*; the remainder were brought in.

AMBERGRIS.—A few lots were offered, amounting altogether to 42½ oz. What was sold was of poor quality, one pitchy lot of 19½ oz. fetching 14*s.* 6*d.*, but even that was a speculative price. Smaller lots of grey and soapy sold at 30*s.* to 50*s.*, and a superior lot is held at 10*l.*

ANNATTO.—Ten baskets bright soft roll bought in at 1*s.* *Seeds*: Of 17 parcels 5 sold; good bright Ceylon at ¾*d.*, and West Indian, somewhat dark, at 2½*d.*; 12 packages fine bright West Indian were bought in.

ARROWROOT.—St. Vincent: the price obtained to-day was 2*d.* per lb.

ASPHALTUM.—Eighteen cases Syrian bought in at 28*s.*

BALSAMS.—Twenty tins of *Copaiba* were offered, only five of which were quite up to standard quality, the rest being dark, and all but one tin would require filtering. None was sold, the broker putting 2*s.* to 2*s.* 9*d.* upon it as buying-in prices.

BENZOL.—The upward tendency has not strengthened; 90 per-cent. can still be bought at 4*s.* 1*d.* to 4*s.* 3*d.*, and 3*s.* 1½*d.* to 3*s.* 2*d.* for 50 per-cent.

CALABAR BEANS.—One bag of good genuine beans was bought in at 5*d.*

CALUMBA.—There was a good supply on show—viz., 107 cases, part of which was washed root; 85 cases were bought in at 20*s.* to 22*s.* 6*d.*, there being no bidders for that, but one broker succeeded in disposing of 9 bales of bright root (washed) at 15*s.*, and 33 bales small to bold unwashed root, fairly sound, at 12*s.*

CAMPHOR (CRUDE).—At to-day's auctions 40 tubs of good dry *Japanese* failed to find buyers.

CANELLA ALBA.—Eight packages fine whitish bark, somewhat broken, offered, refused, and bought in at 24*s.*

CARDAMOMS.—The offers consisted of 69 packages of fruit and seeds, and the whole was disposed of. Fine bold *Mysore* at 3*s.* 6*d.*; medium, of fair colour, 2*s.* to 2*s.* 5*d.*; and small mixed, with colour a little off, 1*s.* 6*d.* to 2*s.* There was a fair supply of Ceylon *Malabar*, mostly well-harvested, the boldest and best coloured selling from 1*s.* 7*d.* to 2*s.* 4*d.*; and lower qualities down to 1*s.* 3*d.* Damaged fruits, mixed with skins and seeds, sold from 10*d.* to 11½*d.*; and seeds went off well off at 1*s.* 5*d.* to 1*s.* 7*d.*

CAYENNE PEPPER.—Five cases of a bright red powder were put up under this heading, the whole comprising 20 tins of 28 lbs. each, and it sold at 6*d.* and 7*d.* This was not true cayenne pepper, but the powder of *Capsicum annum*, or similar mild fruit.

CINCHONA.—Seventy-five odd packages came into the sales to-day; it consisted mainly of Crown bark, but nobody seemed eager to buy at the prices which brokers asked. Some first and second class damaged changed hands, the former, a nice small thin quill, little the worse of its damage, fetching 2*d.* to 2½*d.*, and a bad lot of somewhat bolder bark 1*d.*

CREAM OF TARTAR.—The firm tendency which set in at the end of last week has continued, the quotations now being 101*s.* to 102*s.* for best white crystals. Scarcity in the article is reported to be the reason for the advance, something less than 60 casks only having been landed during the week.

COLOCYNTH.—At to-day's sales 35 parcels were offered, none of which, however, was of extra good quality: four parcels were disposed of at the auction, and two privately. Of those sold by auction, one parcel, sea-damaged, fairly good colour, brought 11*d.*, and for very broken fruit, with a considerable proportion of seeds, 9½*d.* was paid; the remainder were bought in.

CONDURANGO.—Only one bale was offered to-day, and sold at 3½*d.*

COWHAGE.—Six packages were offered, and two sold at 3*d.*, those being a good article for the price obtained.

CUBEBS.—Twelve bags of somewhat shrivelled berries, one-fourth stalky, were again offered, but could find no buyer, an offer of 18*l.* being refused.

CUMIN SEED.—The demand for this seed proved to be far more feeble than the supply, only 20 out of 195 packages changing hands at 23*s.* This was clean seed of good size.

CUTCH.—Quiet: 400 boxes *B.* & *E.* brought 31*s.* 6*d.*, and in Liverpool *Flag B.B.* has been sold at 33*s.*

CUTTLE-FISH.—Four barrels of bold and pale bone sold at 3*d.*, and 1 barrel of somewhat smaller and darker sort brought 2¼*d.*

DRAGON'S-BLOOD.—At to-day's auctions, 10 cases were offered, 9 of which, being dark and resiny, could not find a purchaser at 60*s.* There was, however, very brisk bidding for a case of bright crimson lump, inclined to be powdery, which finally sold at 11*l.* 12*s.* 6*d.*

ELATERIUM.—A box of *Maltese*, of good appearance, and weighing 4 lbs. or thereabouts, was offered for sale, but bought in at 4*s.* 6*d.*

ERGOT OF RYE.—Nineteen cases of clean, sound *Spanish* were put up, but failed to find purchasers at 1*s.* 2*d.*

EUPHORBIA PILULIFERA.—A parcel of East Indian, weighing 90 lbs., brought no bidding.

FENUGREEK SEED.—Two hundred bags of *Mogadore* were all bought in at 6*s.*

GALLS.—The supply was large—nearly 1,400 packages—and the demand practically *nil*, a few odd lots of white Turkey only selling at 45*s.* We hear that the new crop is not very satisfactory.

GUM AMMONIACUM.—Five cases of indifferent quality, being somewhat off colour, bought in.

GUM ARABIC.—Forty packages of very ordinary *East Indian* and *Turkey* failed to find purchasers.

GUM ASAFŒTIDA.—Of 237 cases, the greater part being spirit soluble, offered to-day, nearly one-half was disposed of, prices being from 20*s.* to 21*s.* 6*d.* for fair mixed tear and lump, and 15*s.* to 16*s.* for fused lump.

GUM BENJAMIN.—Twenty-eight cases of *Sumatra* were offered, and none of it could be classed as superior. The best showed a good almond interior, but rather granity outer layer, and it sold at 8*l.* to 8*l.* 10*s.*; seconds, with a considerable quantity of woody fibre, 6*l.* 2*s.* 6*d.* to 6*l.* 10*s.*; a so-called gum which was heavily loaded with woody and stony matter sold at 4*l.* 15*s.* to 4*l.* 17*s.* 6*d.*

GUM ELEMI.—Thirty cases of as fine resin as has been seen in the market for a long time sold very rapidly at from 55*s.* to 57*s.* 6*d.*, the higher price being given for fine white resin containing little insoluble matter. There were also offered 28 barrels of a mixed sort, as fresh as the other, but carelessly collected, and much contaminated with wood, &c. This did not find a buyer, although it would do fairly well for varnish.

GUM MASTIC.—Some pretty resin was offered, altogether 5 cases, which were bought in at 2*s.* 6*d.* to 2*s.* 9*d.*

GUM MYRRH.—Fifty-three packages of sorts were offered, and 10 casks of ordinary found buyers at 75*s.*; inferior dark and stony sold at 23*s.*, and better sorts went for 83*s.* to 84*s.* Two cases of superior pickings sold for 7*l.*

GUM OLIBANUM.—Ten cases of chippy gum, fairly good as to colour and odour, were bought in at 14*s.*, much above its value. A parcel of excellent olibanum, in large tears, was offered privately; 10*s.* 6*d.* would buy it.

GUM SANDARAC.—Twelve casks pale and a little dusty bought in at 90*s.*

GUM TRAGACANTH.—Ten casks of fine white and large flakes bought in at 11*l.* It is reported from Turkey that the market there is good, with more buyers than sellers.

HONEY.—*Jamaica*: 19 packages were offered, and partly sold at 27*s.* to 29*s.* for ordinary, and 31*s.* for good. Of 15 cases *Australian*, two of the palest sold for 31*s.*, but the rest found no buyers; 9 cases selected Australian in 2-lb. tins were bought in at 1*s.* per tin.

IPECACUANHA.—Twenty-eight bales were offered, mostly first and second class sea-damaged. There was very little wrong with the first, and it sold at from 7*s.* 5*d.* to 7*s.* 9*d.*, while the second-class brought from 7*s.* 4*d.* to 7*s.* 6*d.* All the sound root, consisting of some 8 packages, was bought in. The prices given are from 2*d.* to 3*d.* dearer than those at the last sales.

JALAP.—Of the 31 packages offered, a considerable proportion consisted of cut stem, there being few tubers in these parcels, and none of it were sold. Sound tubers, small but heavy, partly sold at 1*s.* 6*d.* to 1*s.* 7*d.*, and slices at 5*d.*

JAMBUL.—A package of false seeds was offered, but no bids were made.

KOLA NUTS.—Two packages of dry brown nuts sold at 11½*d.*; and 2 packages wormy, reddish colour, at 1*s.* 6*d.* to 1*s.* 8*d.*

KOUSSO.—A package of good drug could not find a purchaser at 1*s.* 6*d.*

LIME-JUICE.—At to-day's auctions 26 packages were put up without reserve, and 11 puncheons of dark juice, free from scum, sold at 4*d.* to 4¼*d.*; 15 hogsheads pale and scummy were bought in.

LIQUORICE.—Six bales of pale yellow decorticated *Bombay* root were bought in at 47*s.* 6*d.*—45*s.* would buy.

MATICO.—Twelve bales of large unbroken leaves, part being carefully harvested and of bright green colour, could not find a purchaser.

MENTHOL.—Two cases dry crystals bought in at 8*s.* 6*d.*

MORPHIA.—100 ounces of Smith's make sold at to-day's auctions at 5*s.* per oz.

MUSK.—There were no really very fine parcels offered. *Tonquin*: first pile, thin skin, sold at 82*s.* 6*d.*, and a few caddies thicker skin brought 76*s.* Several caddies of thin skin, somewhat ammoniacal in odour, were bought in at 87*s.* to 90*s.* Some third pile was sold at 30*s.* 6*d.*, and inferior very thick skin lots at 29*s.* *Cabardine* grain musk, of which there was a fair show, failed to find buyers, and for 5 caddies a bid of 16*s.* 6*d.* was refused. A small lot of *Yunan* sold at 30*s.*, a few bottles of inferior *grain* at 6*s.* to 7*s.*, and trimmings at a nominal sum.

NUX VOMICA.—A single bag of "sweepings," which consisted of seeds just a little off colour but perfectly sound, was quickly bought up for 5*s.*, but 40 bags of sound Madras could not catch anybody at 1*s.* and 1*s.* 2*d.*

OIL (CASTOR).—Twenty-five cases of pale *East Indian* have been sold privately. Ten cases came up for sale, but nobody would buy at 4½*d.*

OILS (ESSENTIAL).—*Cajaput*: 20 cases of pale yellow oil sold at 4*s.* per bottle. *Cassia*: Some muddy oil could not command a purchaser. *Cinnamon*: A little was offered, and bought in at 2*s.* 3*d.* No offers for the leaf oil. Fifty-six cases of *Citronella* oil have been sold privately, and 24 cases which came up in auction were bought in at ¾*d.*

OILS (VARIOUS).—*Cocoanut* has got dearer within the past few days, the spot price being 30*s.* for fine Ceylon in pipes. *Cottonseed*: spot quotation for refined is 21*s.* 6*d.* to 22*s.* 6*d.*, and in forward delivery prices there has been no change. *Linseed*: In London the quotations are 24*s.* 3*d.* to 24*s.* 9*d.*, according to package, and in Hull 24*s.* spot for naked. As the seed is advancing steadily, these quotations cannot long rule. There is no change in *Olive* oil, and the same has to be said of *Palm* oil, but the latter is decidedly firm at

last week's quotations. *Petroleum* is a shade easier. *Turpentine* is easier, spot quotation for American being 31*s*.

OPIUM.—A Smyrna correspondent, writing on the 9th informs us that up to that date there have, since the end of last month, been sales of 35 cases of manufacturing opium at rather higher prices, these being attributed to the fall of exchange on London. The quotations at the above date were for new opium, 12*s*. 5*d*. per lb., f.o.b., old Yerhi *tale quale* under same conditions, 11*s*. 8*d*., and 11*s*. 5*d*. for usual run of *tale quale*. The uncertainty still existing as to whether the duty on opium is to be abolished in America or not puts a stop to business for the present. The Constantinople market is reported to be firm, with steady sales; 36 cases of old Salonica changed hands at 11*s*. 2*d*., 30 of old Kara Hissar at 10*s*. 2*d*., and 12 of old Nalli Han and Bey Hazar at from 11*s*. to 11*s*. 3*d*. To-day the market is practically unchanged here so far as prices are concerned, but there is a decidedly firmer feeling. A Smyrna telegram of to-day's date reports "no change" there. It is reported that an effort is being made to introduce the cultivation of the poppy into Mexico. The soil and climate of the country are said to be well adapted to the plant; and there is no doubt that if the industry were fairly established—but this will take a few years to accomplish—the opium produced would find a market in the United States.

ORANGE-PEEL.—Thirty-two packages were offered, but only 2 of thin dark peel sold at 6*d*.

QUICKSILVER.—Last week's prices still obtain, but the market is quiet.

QUININE.—This has been a week of excitement, speculators having rushed in and set up the price from 1½*d*. to 2*d*., their transactions since Saturday amounting to no less than 485,000 oz., it is said. On Monday and Tuesday the price obtained for certain German brands on spot was 1*s*. 1*d*., but day by day the price increased, until this day the sale of 10,000 oz., spot, was made at 1*s*. 1¾*d*., while 100,000 oz. "Auerbach," Sept.-March, was sold at 1*s*. 2*d*. Brunswick is quoted at 1*s*. 2½*d*. for November, and B. & S. 1*s*. 3½*d*. spot. We hear of no change in the English makers' quotations—in fact, the movement upwards is entirely speculative. In public sale 10,000 oz. of Fabbrica Lombardo was bought in at 1*s*. 4*d*.—1*s*. 2*d*. being stated as the price.

RHATANY.—There were no buyers for the 67 packages, which were offered. We noticed that one parcel contained some *Para* root.

RHUBARB.—We counted 162 packages, which included some fine high dried and bold flat *Shensi*, uniform in colour throughout, which sold at 2*s*. 8*d*. A good deal of the same variety, not so good in colour, many of the pieces being very rusty, was bought in, but several parcels of fair pinky sold at 1*s*. 6*d*. to 1*s*. 9*d*., and pickings at 9½*d*. to 10*d*.

SARSAPARILLA.—There was a fair show of this drug, altogether 42 parcels being offered, and most of this sold. Native *Jamaica* at 10*d*. to 11*d*.; good bright Jamaica at 1*s*. 2*d*. to 1*s*. 3*d*. for slightly damaged, and 1*s*. 6*d*. for bright sound. A number of packages of *Honduras* sold at 1*s*. 6*d*. to 1*s*. 7*d*.

SCAMMONY.—*Root* of varying qualities was offered to the extent of 78 parcels, and resin 9 cases; but neither commanded respect.

SENNA.—New crop *Tinnevelly* came up to-day, and there was brisk bidding for it, the result being full prices, which are likely to be maintained. 179 packages were offered, and most of this was sold. Damaged, dark, and ordinary small, ½*d*. to 1¾*d*.; small and medium, of better colour, 2½*d*. to 4*d*.; medium to bold bright, 5*d*. to 6*d*. *Alexandrian* in leaf (broken and whole) and pod was offered in abundance, but there were no buyers. A parcel of round leaf was also on show, and was bought in at a ridiculously high figure.

SENEGA.—Six bales offered at 1*s*. 10*d*., but probably because the sample was not shown on Wednesday the broker had to take it back at 2*s*., nobody offering.

SHELLAC.—A distinct change has come over the market since our last report, and prices at the sales on Tuesday were considerably higher. The alteration is attributed in part to the enhanced value of silver. Only one broker offered the gum on Tuesday—viz., 170 cases, of which 100 were disposed of, the prices obtained being for ordinary flat livery to good bright second unworked orange, 94*s*. to 102*s*. 6*d*. Extensive sales, reported to amount to thousands of cases, were made for delivery, T.N. for October being at 101*s*., and for December and January 102*s*. to 140*s*. Several hundred chests have also sold, AC unworked at 91*s*., and worked at 94*s*. On Wednesday there was a decline of 1*s*., with sales of 800 cases, but to-day prices recovered, and 1,000 cases TN changed hands a shilling or two higher than the above-mentioned prices, and 100 cases AC unworked were also sold at 2*s*. higher.

SODA SALTS.—*Bicarbonate* can still be bought at our last quotation, but *Bichromate* stands at 3¾*d*. *Caustic* and *Crystals* are also unchanged. *Nitrate*: 8*s*. 10½*d*. to 9*s*. is quoted for the purified salt, the ordinary being obtainable for 8*l*. 5*s*. to 8*l*. 7*s*. 6*d*., and firm at that.

SPICES.—*Chillies*: Seventy-one bags Zanzibar bought in at 37*s*. *Cloves*: 200 bales Zanzibar sold, fair dark at 5½*d*., ordinary dark at 5¼*d*., slightly mouldy, 1¼*d*., Jan.-Mar. delivery, privately, at 5⅜*d*. *Ginger*: *Cochin* flat, and small sales; small medium washed rough, 20*s*.; wormy native cut, 20*s*.; fair bold, 56*s*. 6*d*. to 57*s*., and *Jamaica* small dull, 68*s*. to 70*s*.; bleached, 78*s*. to 81*s*., and 87*s*. for good. *Mace*: steady; Penang good bright bold pale and red at 3*s*.; fair, partly mouldy; bold red, 2*s*. 3*d*.; and West Indian ordinary to fair, 2*s*. 3*d*. to 2*s*. 6*d*.; good to fine, 2*s*. 7*d*. to 2*s*. 11*d*.; pickings, 1*s*. 10*d*. to 2*s*. *Nutmegs*: steady; Penang (67) 3*s*. 3*d*.; slightly mouldy (79 to 89) 2*s*. 10*d*. to 2*s*. 9*d*.; Bombay, 2*s*. 10*d*.; (100 to 125), 2*s*. 7½*d*. to 2*s*. 4*d*.; and defective 11*d*. to 1*s*. 9*d*.; West India good, 2*s*. 10*d*.; (100 to 97), 2*s*. 8*d*.; and in the shell, 1*s*. 4*d*. to 1*s*. 6*d*. *Pepper*: steady; Singapore fair grey, 5⅛*d*. to 5¼*d*.; good Tellicherry bought in at 5¼*d*.; Komput at 5¼*d*. and Lompoong at 4⅝*d*. also bought in. *White pepper*: quiet; fair dull Penang, 6½*d*.; September-November shipment, privately, at 6 7/16*d*. to 6⅜*d*. *Pimento* firm, and selling at 3*d*. for medium, and 3⅛*d*. for fair coarse.

SQUILL.—Thirty bags of imperfectly dried, but clean white cuttings bought in at 2*d*.

STROPHANTHUS.—Two bags of mixed silky brown and green are to be had for something under 7*s*., the price at which it was bought in.

TAMARINDS.—Some well preserved *Jamaica* fruit changed hands at 14*s*. 6*d*. to 15*s*. 6*d*., the legumes being entire, and not quite drowned in syrup. *East Indian* was not in demand, although offered.

TEA (CHINA).—The market is kept steadily supplied with useful good common and medium Congos, and at the recent reduction in prices a fair trade has been done in the country. Splendid value is to be had in N.S. Moning and Kaisow siftings, the supply of which has been in excess of the demand, with the result that really good liquoring teas, and in case of Moning Siftings *fine* liquoring teas, may be had from 3¾*d*. to 4½*d*. Fine Monings are getting into small compass, and some of the thick liquoring teas, selling a month ago at 1*s*. 4*d*. to 1*s*. 8*d*., cannot now be matched. Scented teas are quiet, with a steady tone. Green teas are in a state of suspended animation pending the arrival in quantity of New Teas, of which the first three lots were shown this week. Assams are a weak market, and as common teas are still dear, and the reports from India say that the bulk of tea coming forward is common, we must expect a steady dropping market till prices for lower grades reach a far safer level. Ceylons are unchanged, except that the scarcity of really fine grades is becoming very marked and standard teas are much wanted. Leaf teas, from 9*d*. to 11*d*., are cheap and good, and Broken Pekoes from 11*d*. to 1*s*. 2*d*. are worth attention. Ceylon Dusts are easier.

VANILLA.—The supply brought forward was not large, and there was nothing to boast about it so far as quality is concerned, although there were several tins of 6½–7in. good colour, crystallised, which sold at 15*s*. to 17*s*. Most of the same size, somewhat faulty in colour and crystallisation, fetched 10*s*. 6*d*. to 12*s*. 6*d*.; lower qualities still, 8*s*. to 9*s*. 6*d*. 5½in. to 6½in. sold at from 5*s*. 6*d*. to 9*s*., according to quality; and damaged, mouldy, and small at 2*s*. to 4*s*.

WAX.—Exclusive of Japan and East Indian wax, none of which could find a purchaser, there was a supply of

165 packages *Madagascar* (150 bought in), and 61 packages *Australian* and Jamaica, which sold readily. It was mostly fair in colour and sharp in fracture; grey *Australian* selling at 5*l.* to 5*l.* 2*s.* 6*d.*; mixed grey and yellow, 5*l.* 10*s.*; while ordinary grey *Jamaica* sold at from 5*l.* 5*s.* to 5*l.* 10*s*, up to 6*l.* 2*s.* 6*d.* for fair to good. Some odd packages Madagascar found purchasers at 5*l.* 2*s.* 6*d.* to 5*l.* 5*s.*

THE GERMAN MARKETS.

HAMBURG, August 19.

THE past week has brought a somewhat better prospect on our market, although the actual business done is not much to boast of, for the demand in the various articles has been largely of a speculative character.

ALOES (CURACAO).—The imports have been pretty considerable, but the price remains unchanged.

BALSAMS.—*Copaiba* excites more interest, the value in first hands being, if anything, at enhanced prices, and the market generally is firm. *Peruvian* is a little higher, in consequence of a brisker demand, and business for forward delivery has been done at full prices. Speculators have bought up 300 cases with the object of getting a firmer hold of the article. *Tolu* unchanged.

CASCARA SAGRADA and CONDURANGO are dull and cheap.

JALAP.—In consequence of New York advices, supposed to be influenced by speculators, all the stock on this market has been secured by one buyer, who will not sell for less than 3.50m. to 3.60m.

SPERMACETI unchanged at 3m. to 3.05m. It is reported that the article is worth 3.40m. in New York.

HONEY is altogether in a better condition, and large quantities, especially of *Chilian*, have been sold at good prices. Old stocks are also moving off.

WAX.—Business in *Carnauba* has been done at rising prices, and nearly the whole of the stock has changed hands—yellow at 135m., and grey at 105m. *Bees'-wax* is very scarce, and all kinds are held at high prices.

CHEMICALS IN THE NORTH OF ENGLAND.

THE market for heavy chemicals has been steady during the past week, and prices have continued firm.

Quotations for almost every article of manufacture controlled by the Chemical Union are now in the market for delivery over the last quarter of this year and the whole of next. Buyers, however, do not seem anxious to purchase forward at prices quoted, although some sales of bleach over next year are reported to have been made. Papermakers, especially, are getting restive at the progress of the Union, and it is reported that the Papermaker's Association have resolved that every effort should be made to prevent the carrying out of the scheme, and in the event of the Union being formed to start their own chemical works.

According to a statement made a few days ago by one of the leading promoters of the Alkali Union, their motto is "Defence, not defiance," and alkali-makers, it is said, have "kept more than half the shares of the proposed union themselves. They do not desire any artificial inflation of prices, but they wish to restrain the artificial depreciation of prices caused by unrestrained competition. There will probably be no saving in management — each works will require the same care and attention that is now bestowed upon it, but there will be immense economy in production, and it is more than probable that, in a short time, the result of combination will rather be to lower prices than to raise them. I think it may be assumed that any consumer of alkali who is uneasy at the prospect of combination will have no difficulty in securing contracts at present prices over a considerable future."

BICARBONATE OF SODA continues firm in price, and is quoted 5*l.* 15*s.* per ton, less 2½ per cent. discount, in 1-cwt. kegs, f.o.b. Liverpool, with usual allowances when taken in larger-sized packages.

BLEACHING-POWDER continues weak in price on Tyneside, with little demand at the moment. Lancashire market keeps fairly firm, and better prices are obtainable. For prompt quotations are 5*l.* 7*s.* 6*d.* to 5*l.* 10*s.* per ton on rails Widnes and St. Helen's, in softwood casks; and 5*l.* 15*s.* to 5*l.* 17*s.* 6*d.* per ton in hardwood casks, f.o.b. Liverpool. Glasgow prices on rail, 5*l.* 2*s.* 6*d.* to 5*l.* 7*s.* 6*d.* per ton. Tyne prices: 5*l.* 5*s.* per ton in softwood casks; and 5*s.* 7*s.* 6*d.* to 5*l.* 10*s.* per ton in hardwood casks. For delivery ex ship Thames, 5*l.* 15*s.* per ton in ordinary casks, with extras of 20*s.*, 15*s.*, and 5*s.* per ton for 1, 1½, and 3-cwt. packages. For forward delivery Union prices are 5*l.* 15*s.* per ton on rails Widnes and St. Helen's, and 6*l.* per ton, f.o.b. Liverpool and Tyne, for delivery October to December; and 6*l.* and 6*l.* 5*s.* per ton respectively for delivery over the whole of next year. Some sales have already been made at above figures over 1891.

CAUSTIC SODA continues firm and steady in price. For delivery October to December the price of 70-per-cent. has been fixed at 10*l.* 5*s.* per ton, and for the whole of 1891 at 10*l.* 10*s.* per ton, f.o.b. Liverpool. For prompt and to end of September makers quote 9*l.* per ton for 60-per-cent. white, 10*l.* per ton for 70-per-cent., and 10*l.* 17*s.* 6*d.* to 11*l.* per ton for 74-per-cent., f.o.b. Liverpool, less 2½ per cent. discount; 77-per-cent. quoted at 10*l.* 10*s.* per ton for delivery up to end of the year; and 13*l.* 10*s.* per ton for ground caustic in barrels of 3-4 cwt., net cash, f.o.b. Tyne.

CREAM CAUSTIC.—Market firm at prices ranging from 8*l.* 5*s.* to 8*l.* 10*s.* on rails; and 8*l.* 10*s.* to 8*l.* 15*s.* per ton, f.o.b. Liverpool, less 2½ per cent. discount.

CHLORATE OF POTASH.—Market stronger and better in price. For prompt delivery 5*d.* per lb, less 5 per cent, is quoted at usual ports of shipment. For delivery October-December 5½*d.* is asked, and for the whole of next year 6*d.* per lb.

HYPOSULPHITE OF SODA continues in excellent demand, and difficult to obtain prompt deliveries in quantity. Price has been advanced this week, and makers are now asking 6*l.* per ton in 1-cwt. kegs, and 5*l.* 10*s.* per ton for casks, less 2½ per cent. discount, f.o.b. Tyne. For delivery at Manchester and Liverpool quotations are 6*l.* 5*s.* per ton and 6*l.* 15*s.* per ton for casks and kegs respectively, less usual discount.

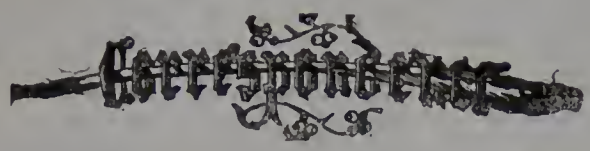
SODA ASH steady, and prices unchanged. Caustic quoted 1¼*d.* per degree, and carbonated 1⅜*d.* to 1½*d.* per degree, f.o.b. Liverpool. Tyneside carbonated quoted 1⅜*d.* per degree, less 5-6 per cent. prompt delivery. For delivery over the last three months of the year and the whole of 1891 quotations are 1⅜*d.* per degree, less various discounts, according to quality and strength.

SODA CRYSTALS steady, and firm in price: 3*l.* per ton on rails, and 3*l.* 5*s.* per ton, net weight, f.o.b. Liverpool, packed in 3-cwt. barrels; 2*l.* 16*s.* per ton, gross weight, f.o.b. Tyne; and 3*l.* 2*s.* 6*d.* to 3*l.* 3*s.* 6*d.* per ton, gross weight, ex ship Thames. For delivery October-December quotations are fixed at 2*l.* 16*s.* 6*d.* per ton, and for the whole of next year 3*l.* 5*s.* per ton.

SULPHATE OF COPPER weak, and market quiet. Price quoted for prompt is 18*l.* per ton, less 5 per cent. discount, f.o.b. Liverpool, and for delivery early next year 19*l.* to 19*l.* 10*s.* per ton.

SULPHATE OF SODA firm and scarce, and price for prompt is 32*s.* 6*d.* per ton, in bulk, on rails Widnes and St. Helen's. Tyne market still quiet, without change: 30*s.* per ton in bulk, and 41*s.* to 42*s.* per ton in casks for export shipment, f.o.b. Tyne. Forward quotations are 40*s.* per ton in bulk on rails Widnes and St. Helen's, and f.o.b. Tyne, for October to December delivery, and 45*s.* per ton for the whole of 1891.

WOOD-GUM.—When loofah, straw, or cherry-wood, is extracted with soda, and the extract mixed with alcohol, a gum is precipitated; in the case of straw, the yield of crude gum is 16 per cent.



Memoranda for Correspondents.

Always send your proper name and address: we do not publish them unless you wish: if you do not, please use a distinctive nom-de-plume.

Write on one side of the paper only; and devote a separate piece of paper to each query if you ask more than one, or if you are writing about other matters at the same time.

If you send us newspapers, please mark what you wish us to read.

Ask us anything of pharmaceutical interest: we shall do our best to reply.

Before writing for formulæ consult the last volume, if you have it.

Letters, queries, &c., will be attended to in the order received.

Registration of Chemists and Druggists.

SIR,—Now that the curtain has been lifted, and last week's issue reveals the personality of "Mr. J. Walker, of Glasgow," I am not surprised at the correspondence that has passed relative to the above. But surely Mr. Walker has not made the usual mental calculation when he bases his claim for registration on the fact that he was engaged in the business before the passing of the Act. It is now twenty-two and a half years since the Act was passed—Mr. Walker is not yet a middle-aged man, and could not have been out of his "teens" in 1868. Where does his claim lie? It is all very well to point to clause 3 and say that he was keeping open shop for the "dispensing and compounding of physicians' prescriptions," and claim that he was entitled as much as his employer to the title of "chemist and druggist"; but if Mr. Walker's employer had been compelled to stop payment, would he have come forward and paid up? I expect not. Mr. Walker makes a great deal about not finding the words "in business on his own account" after certain phrases. But he entirely ignores clause 4, which makes special provision for assistants who, at the passing of the Act, were of full age, and had been engaged for not less than three years in the dispensing of prescriptions, thus showing that chemists and druggists, within the meaning of the Act, were those already in business on their own account. The claim would mean that anyone who was at the business previous to 1868 (no matter for how long), and who had not been able to qualify even by means of the "Modified examination" (which, by the way, ought to have been discarded long ago), can now claim to be registered without let or hindrance.

As regards the individuals "in a similar position to Mr. Walker," spoken of in "Lincolnshire's" letter, the pleading for help, the catching at the straw, is amusing. The general opinion expressed here is that Mr. Walker may as well save himself the trouble and expense. Let Mr. Walker and those in the same position go through their examinations and prove that they are the qualified men they claim to be.

Glasgow, I remain, yours, &c.,
August 16. FAIRNESS TO ALL. (115/62.)

Blaud's Pills.

SIR,—The Blaud's pill question is indeed a very interesting one, and I fully agree with Mr. Haitly Burn that it is well worthy to be spoken about in this excellent journal. I myself have experimented considerably with the pills, and have tried every formula which it seemed reasonable to try; but the only one which I can so far recommend is one which I sent to this journal a year or so ago, and which is as follows:—

Potass. carbon. pur. pulv.	.. gram.	90 [ʒxxiiss.]
Ferr. sulphat. siccat. pulv.	.. „	50 [ʒxiiss.]
Glycerini	„	40 [ʒx. by weight.]

Fiat pil. No. 600.

This formula was tried by a chemist in Glasgow, if I recollect aright, and, as he stated in your journal, he found it very satisfactory.

The pills can be kept in stock for months when preserved in a stoppered bottle without any sign of alteration; but owing to the hygroscopic nature of the glycerine, they must not be exposed to the air except for a short time only, as they become soft, and ferric hydrate is developed. Addition of glucose, as Mr. Haitly Burn advises, or rad. althæ, is not necessary, for I find that when this is done the pills acquire a bad odour.

I should be glad if any of your honoured subscribers would give their experience regarding the matter.

I remain, dear Sir, yours truly,
A. VON CONOR-CAROLSFELD-KRAUSE.
Otterup Apotheke, Denmark, August 15.

Dispensing Charges.

SIR,—One thing wanted by the trade is a scale of charges for dispensing with some authority about it. Say a scale authorised by the Pharmaceutical Society of Great Britain, or by the Board of Examiners of the Pharmaceutical Society, or by the British Pharmaceutical Conference, so that when a customer grumbled at a charge the list could be shown to prove that the medicine was priced according to a recognised professional scale. J. K. H. (116/29.)

[We should think this would be of especial service to cutting chemists. Nothing would please them better than to be able to exhibit the authorised scale and their own tariff side by side.—ED. *C. & D.*]

Juries.

SIR,—Is it not time that the trade seriously agitated for exemption from serving on juries? I am, of course, well aware that Major men can claim exemption, but why the exception I have never yet been able to discover. Their responsibilities and liabilities are certainly no greater, and probably, taken as a body, considerably less. I will not enter into a discussion as to the justice of the law, but it does seem an anomaly that, because two persons choose to quarrel over a pig, twelve or fourteen tradespeople should be dragged away from their businesses at very great personal and public inconvenience and expense, and then be told that their services are not required. I will give you my experience of last week. On Monday evening I received a summons to attend the county court at a town eight miles distant on the following Wednesday morning by ten o'clock. I immediately wrote to the registrar, stating that at the present time I was without an assistant, and that there would not be time to engage a qualified man to take my place, and, as prescriptions were likely to be coming in from the surrounding neighbourhood, my absence would probably cause considerable public inconvenience. On the Wednesday morning I received a reply that I could not be exempted, consequently I had to leave home at 8 A.M. and wait about until the court opened at ten. After the judge had heard about thirty cases, the registrar rose from his seat and said those gentlemen who were summoned on the jury might leave the court. I then had to hire a conveyance back, as there was no train till one o'clock. I afterwards ascertained that the litigants had settled their quarrel the day before. Surely, on grounds of public convenience and safety, we ought to be equally exempt with Major men. Yours, &c.,
A LOVER OF JUSTICE. (117 63.)

Doctor *v.* Chemist.

SIR,—Were it not that false impressions are being formed in connection with the inquest held upon the body of Lily Hackford, I should not, in face of the remarks of Dr. Clegg, and the finding of the jury, have thought it worth while to reply to the attack made upon me, with so much decency, by Dr. Arthur Tuxford. I shall feel greatly obliged if you will allow me to state that the child was not brought to me, when the accident occurred, neither did I dress the burn, nor in any way prescribe for the child, other than by advising the use of carron oil in preference to the sweet oil, demanded. Now with respect to my cupidity. The amount

spent with me, as far as I remember, was 4*d*. This is Dr. Arthur Tuxford's idea of cupidity. Will the doctor's patients kindly take a note of this? With regard to the insulting remarks which Dr. Arthur Tuxford thought fit to apply to that class of the community to which I have the honour to belong, I think I cannot do better than leave them without comment, to the discrimination of the public and the tender mercies of my fellow "impostors."

I remain, yours truly,
ROBT. A. MUNKMAN, Junr.

SIR,—I have just read the account of an inquest held at Boston a few days since, in your journal, touching the death of Lily Hackford. It appears to be another instance of "dog in the manger," and I was pleased to observe the jury and coroner took a common-sense view of the matter, and exonerated the chemist from all blame.

I can scarcely imagine that a gentleman holding such certificates as the doctor in question could have lost sight of "fellow feeling" and that which defines a gentleman—manners—to such a degree as to assert in an open court of justice that chemists who prescribed for (generally) poor people in simple cases "were a horrible class of impostors," "would not give them a chance to live," and "would have them all exterminated."

Then, again, speaking of the "cupidity" of such druggists, I know doctors and surgeons who hire out and sell domestic appliances of every description that are needed for invalids' use, even to "Wright's coal tar soap." Cupidity, indeed!

I say, let the medical profession uphold their position. If they desire to dispense (even if it be done by unqualified dispensers) let them; but let the druggist "have a chance to live," and not fill up their surgeries with those appliances which strictly belong to, and ought to be hired out or sold by the druggist. Yours respectfully,

W. C. H. (117/52.)

Stubborn Facts (116/68) is stirred by Dr. Tuxford's remarks to send us several instances of cures effected by a chemist after doctors had failed. No doubt some such cases could be reported and verified, but we do not see the object. Most chemists will agree that a doctor's training must fit him better for the treatment of disease than that of a chemist; but all reasonable doctors will recognise, on the other hand, that a chemist's assistance in regard to the minor complaints to which we are all subject is of considerable value, and will certainly be resorted to with or without the approval of some excitable gentlemen.

Photography and "The Chemist and Druggist."

A chemist, largely interested in photographic pursuits, writes, "An examination of the advertisements of your mammoth Summer number shows that some of the advertisers are waking up to the fact that wide-awake chemists are worth catering for in this line. I noticed among them the irrepressible "Demon" cameras facing Darton's novelties. Their small portable hand-camera I had an opportunity of examining at the last Crystal Palace Photographic Exhibition. J. Orme & Co. make a camera the centre ornament of their advertisement, and Perken, Son & Rayment give a summary of their leading lines. One of the most striking features of the number was Swift's coloured inset. The "Memorandum" camera is one of the most useful appliances of the kind yet devised, and with the accessories would make a valuable adjunct to the medical man's note-book for recording special features of disease, &c. Of the chemical advertisements it is almost impossible to speak in detail."

The Treatment of Obesity.

SIR,—In a paragraph in your last number you state that "Homœopaths have a simple method of dealing with obesity," and then refer to a case reported in the last number of the *Homœopathic Review* by Dr. Drysdale, showing that bichromate of potash and abstinence from beer cured his patient, while in the case of a friend those measures were without avail.

Any reader of your paragraph would imagine that bichromate of potash and abstinence from beer constituted the usual method of dealing with obesity among homœopaths. The last paragraph of Dr. Drysdale's paper ought to have prevented your giving currency to such a notion. The patient in question suffered from an error in digestion, of which, as Dr. Drysdale says, "obesity was a subordinate symptom." The whole of the symptoms presented by the patient resembled those produced by the bichromate of potash: he took this medicine, therefore, not with any relation to the obesity as such, but to cure that particular form of indigestion from which he suffered, and of which the obesity was a consequence. The indigestion cured, the obesity vanished. Cases of obesity independent of a dyspepsia unlike that produced by the bichromate of potash would not be cured by it, and no homœopath would suppose such a thing possible. Yours, &c.,

Grantham, August 19. A. C. P. (118/30.)

Kleptomania.

SIR,—In your impression of to-day your short report concerning John P. Phillips, chemist, of this place, is calculated to convey a wrong impression to the readers of your paper, inasmuch as the evidence proved Mr. Phillips to be a man who has always borne a very high reputation for honesty and integrity, as set forth in his testimony produced at the court; and his being placed in the unfortunate position of being charged a second time with stealing flowers proves something wrong, and medical evidence proves him to be suffering from kleptomania, as you will see by the medical certificate. He is perfectly sane upon everything else he does with this one exception. Now, sir, knowing it is not usual for your journal to disseminate matter likely to be injurious to your clients if, as in this case, there are mitigating circumstances, and they are brought to your notice, I should be glad, as one of many who sympathise with the family in this affliction, and for the many friends who would have read your paragraph, to trespass on your space to explain this case a little. If from the few words I have addressed to you you would be good enough to frame a short paragraph setting forth these facts, it would put a different complexion on the case in the eyes of the profession and personal friends who, from a knowledge of the truth, would sympathise instead of condemning one who is to be pitied more than blamed.

I may mention until this most unfortunate affair his most intimate friends were in ignorance of any tendency in this direction, and they will undoubtedly endeavour by every means possible to prevent its repetition. If you will be good enough to explain this in your next issue, all connected with the family and myself will be obliged.

I remain, Sir, your obedient servant,

Bagshot, August 16. CHARLES SKRINE.

B.P. Syntax.

SIR,—Does not the B.P. commit a serious mistake when it gives "solution of dialysed iron" as the rendering of "liquor ferri dialysatus"? It seems to me that the designation "dialysed solution of iron" would also be preferable on the ground that it is more accurately descriptive of the preparation. J. E. A. (118/41.)

Helmsley, York, August 20.

Supply of Drugs to the Army Medical Department.

SIR,—The public at large, and the drug trade in particular, are indebted to Mr. Arthur O'Connor for exposing this little monopoly of thirty-five years' standing for 12,000*l*. per annum, which I doubt not could well stand the reduction of 15 per cent. mentioned by the honourable member. But why should the advantage such as this be confined wholly to London? There are firms in the provinces, wholesale as well as retail, as competent as any in London to supply the article of the desired quality and at a sufficiently low figure, if they get the opportunity.

The plan which I think might be tried with success is that in towns where barracks or military depôts are situated the necessary drugs should be bought from local firms. They could be had as cheap as in London, and the expenses con-

nected with packing and carriage would be considerably curtailed. Then the stock could be kept much lower, the source of supply being always at hand; whereas when goods have to be forwarded by carrier there is always a tendency to increase the bulk. This would be a much more equitable way of dealing out 12,000*l.* of the public money.

Yours faithfully,

JOHN T. COATS.

59 Tolbooth Wynd, Leith, August 20.

MISCELLANEOUS INQUIRIES.

A large number of correspondents ask us for formulæ and other information already published in this journal. It is not fair to more careful readers that we should frequently repeat such information, and so long as the back numbers containing the formulæ or replies required are in print we must decline to do so. Back numbers of our weekly issue can be obtained from the publisher at 4d. each.

Correspondents who have made inquiries regarding the following subjects will find the information in the numbers indicated.

112/70. *C. E. L.*—**Dispensing for Medical Men.** November 23, 1889, p. 743.

115/9. *Arbeitsam*, and 117/44, *J. Wood.*—**Graph Composition.** March 1, 1890, p. 313. If too hard, more glycerine; if too soft, more glue or heat.

112/57. *J. R.*—**Hair-dye.**—March 22, page 428; May 17, page 679. **Ringworm in Cattle.**—January 26, 1889, page 148.

118/8. *Johannesburg.*—**Ferro-prussiate Paper.**—July 26, page 126.

118/24. *Moor.*—**Manufacture of Celluloid.**—November 17, 1888, page 703; December 22, 1888, page 846.

102/11. *C. D.*—Thanks, but we cannot spare the space, and we are not so sure of the desirability of the thing as you seem to be. (2) S. H. Johnson & Co., Stratford, E., are makers of filter-pumps.

103/69. *Nemo.*—Some dentists have a protective plate of vulcanite for the upper jaw, but it is not generally used, because anything to be useful must be thick, and that makes it certain that the jaw will always be hit. Experience and practice are the best protectors, and you will get both in course of time.

113/12. *J. Ingle.*—We have not the formula for the Drayton developer.

105/50. *Petroleum* explains to us a difficulty which he experiences with an apparatus for **Supplying Paraffin.** The cisterns are in a warehouse 70 feet from the shop, and the fluids are conveyed by pipe into Dale's glass measures, and thence into customers' bottles. If ever the cisterns get empty, a bubble of air gets into the pipe and stops the flow, even when the cistern is filled up. The bottom of the cistern is about 12 feet above the draw-off in the shop. We have seen the same difficulty under similar circumstances. It was overcome by taking up the supply-pipe, as originally placed under the floor, and carrying it along the outside wall of the warehouse, with a gradual incline into the graduated measure in the shop. It is the depth of the bend which causes the difficulty apparently. We suggest that you should put a stop-cock at the egress from the tank, which you should close while it is being filled; then open the other tap at your measure, and place a vessel under it; and, last of all, open the egress tap, which would give the impetus from its fall of 12 feet. This ought to be sufficient to drive most of the air out. Your syphon as placed will not be of much use. The stop-cock we suggest would be very useful if any leak should occur in your pipe, or should the taps inside go wrong.

100/70. *Warrcyo.*—(1) **Ginger-ale Essences.**—February 8, page 205; May 17, page 679, 1890. (2) Yes. Potassium permanganate will improve water if it contains organic matter or nitrites, which most surface wells do. (3 to 14) Your difficulties with **Syrups** are due to mucous fermentation, which takes place, if the germs be present, without air-contact and in the presence of carbonic acid. Use double your quantity of salicylic acid (10 grs. to ℥xx.), and add to your syrup while still hot. There is no better solvent for your purpose than spirit in which salicylic acid is soluble to the extent of 1 in 4; it is also soluble, but to a less extent, in glycerine and in aqueous solutions of borax, acetate of ammonium, citrate of potash, and phosphate of sodium. Salicylic acid may be obtained from salicin or oil of wintergreen, but is usually obtained synthetically by the action of carbonic acid gas upon a mixture of carbolic acid and caustic soda. Filter your peppermint cordial through kaolin or chalk; see that your filter-bag is first wetted with water. There is nothing better for filtering syrups, &c., than a felt bag as supplied by any good firm. We should recommend you to a careful study of the Summer Issue advertisements in connection with the soda-water and essence trades, and to communicate with some of the firms who advertise. Any of them will be pleased to give you hints in practical matters. Try Stevenson & Howell's "Aërated Waters, Cordials, &c." Saccharin may be used for sweetening in part, or in the place of sugar. It is dissolved by means of bicarbonate of soda. You might thicken with glucose. We do not know the acid you name; but why not use strong acetic acid, and colour with burnt sugar? Your wants are certainly numerous, but it is a pleasure to assist one who, although 500 miles from even Australian civilisation, wishes to be "up with the times."

105/7. *Howard.*—Manuals treating of dry qualitative analysis:—Galloway's "Qualitative Analysis," Muspratt & Plattner's "Use of the Blowpipe in Qualitative Analysis," and Valentine's "Text-book of Qualitative Analysis."

14/89. *J. W.*—We have failed to find liq. santal. rub. in the formulæ you mention. Lignum santal. rub. is *Pterocarpus santalinus* (red sanders-wood). A tincture in use on the Continent is made by digesting 1 part coarsely-powdered wood with 5 parts (by weight) of spirit. This, perhaps, would suit you.

105/23. *Domum.*—The appearance you complain of in the potatoes is due to the wet season. Dry, bright weather is the only cure, we are afraid. You might try syringing with a weak solution of sulphate of iron.

111/17. *Nutritive.*—**Peptonised Nutritive Suppositories.**—We have seen them made with equal parts of beef peptonoids and cocoa-butter. Melt the cocoa-butter over water-bath, add the peptonoids, and pour into pessary-mould (60 gr.). Martindale recommends making with beef peptone and isinglass.

111/26. *Pylorus.*—The **Remedy for Nervous Diseases** will most likely contain hypophosphites, and possibly ac. phosph. dil. Tartrates, citrates, and hypophosphites blacken. If calcium phosphate had been present it would have precipitated on neutralising before adding calcium chloride. To find out the organic substances is difficult without special training. Do not the taste and odour help you? Colour goes for little. Try barium chloride.

108/13. *Pax* (Paris).—Ure's Dictionary is published by Longmans, Green & Co.

114/50. *W. G.*—We believe that the 1 to 7 **Essence of Peppermint** is oftener sold than the B.P. article. This is doubtless an offence under the Sale of Food and Drugs Act.

114/68. *J. Stewart.*—Ung. hydrarg. co. B.P. is **Scott's Ointment.**

114/13. *Aq. Soda.*—To become an **F.L.S.** you require the signatures of four fellows who know that you are sufficiently distinguished in natural history to warrant your name being placed on the *rôle* of fellows. The entrance-fee is 6*l.*, and the annual subscription 3*l.* Address the Secretary, Linnean Society, Burlington House, W.

113/42. *Oxonian.*—The composition of the medicines used by the fasting men has not transpired—in fact, one refused 2,000*l.* for his secret.

113/73. *Polish.*—Powder the spermaceti, mix with the gum, and make into an emulsion with 2 oz. of water. Dissolve the borax in the glycerine and remainder of the water, and add this solution to the emulsion with constant stirring. You cannot get a perfect mixture under any condition.

113/51. *Yorkshireman.*—(1) You will get all information regarding the registration of trade-marks in the DIARY. You must declare at the time you apply what class of goods the mark is to be used for, and, if registered, it will cover that class only. (2) Any sundries house will quote for brass door-plates. Makers are to be found in all large towns, but we cannot venture to name any.

113/26. *Pax.*—"A mixture to procure sleep" is too general a request. What would do one good might be ineffectual in another case, and might do a third harm; but 30 grains of potassium bromide at bedtime is safe in most cases. A little syrup of orange may be added.

114/72. *Wilts* asks: In making **Liq. Bismuth. P.B.** how much liq. ammon. is required to dissolve 800 grains bismuth. citrat.; and should it be bright and colourless without filtering? His unfiltered solution is a dirty light-grey in colour. [We have no reference at present to the volume of ammonia solution required to dissolve the bismuth citrate; but that is of little importance, for ammonia has to be added until solution is complete, and the odour of ammonia is quite distinct. If the citrate of bismuth has been carefully made it should give a colourless solution; but the straw colour generally comes from a dirty mortar.—ED. *C. & D.*]

116/27. *Pharmacist.*—The matter is not one on which we need ask the opinion of the trade. Your charge was a reasonable one.

161/7. *Country Chemist.*—(1) **Oleum Cornu Cervi** is animal oil or bone oil. **Liq. vol. c.o.**, the old spirit of hartshorn, a partially carbonated solution of ammonia. (2) Do you mean the mercuric sulphate battery?

117/20. *Syr. Hypo.*—The bad odour which arises from some preparations of hypophosphites—the compound syrup, for example—is due to interaction between a sulphate and the hypophosphorous acid, whereby sulphuretted hydrogen is evolved. The remedy for this is to ensure complete decomposition by heat.

117/74. *Y. Hanson.*—**Mushroom Ketchup.**—Sprinkle the mushrooms with common salt, and stir occasionally for two or three days, then press out the juice, and to each gallon of juice add, cloves, ½ oz.; mustard-seed, ½ oz.; allspice, 1 oz.; black pepper, 1 oz.; ginger, 1 oz. (all bruised). Heat gently in a covered vessel until the juice boils; then set aside for 14 days, and strain.

118/12. *S. Jones.*—Aqua regia is the only acid in which gold is soluble.

117/72. *Rhei.*—(1) There is no such list. (2) The B.P. form is the same as the German. (3) Golden ointment for the eyes is red oxide of mercury ointment diluted with 5 to 7 times its weight of lard or vaseline. The yellow oxide (2 grains to 1 drachm) is preferable.

117/34. *S. Lister.*—**Bichromate Battery Solution.**—Bichromate of potash, 6 oz.; sulphuric acid, 5 oz.; water, 48 oz. Mix the acid and water, and when cold dissolve the bichromate in the mixture.

117/53. *F. O.*—Solution of sodium salicylate becomes black owing to the decomposition of the impurities (contained in the salt) through the influence of alkali.

117/54. *J. G.*—**Barrack-Sergeant's Drops.**—Oil of juniper, 1½ oz.; oil of turpentine, 1½ oz.; tincture of opium, 2 drachms; rectified spirit, 3 oz. Mix. Dose, 10 to 20 drops on sugar.

118/15. *A. F.*—**Ext. Apii Fluid.** (Fluid extract of celery fruit).—A 1-in-1 fluid extract made with a menstruum consisting of equal parts of rectified spirit and water.

115/6. *Corporal Trim.*—(1) You can get purified caramel which is not sweet. It is the best brown colouring. (2) Neither of the roots is used for the purpose. Quassia, chiretta, and gentian are the principal bitters employed.

116/56. *Pyx.*—"John Mixer was a chemist's son who lived in *Palmæ* days," &c. This clever rhyme was published in our issue of August 26, 1886.

116/56. *Niger.*—You will find all you want in the DIARY in the article on "Inks." Please note that we do not publish or repeat formulæ because the inquirers have destroyed back numbers. That is foolish under any circumstances, but doubly foolish on the part of those who know that the volumes contain matter which may at any time become worth to them ten times the value of a binding.

114/14. *S.*—Unfortunately there is no cheap illustrated British Flora such as you want. Bentham's "Handbook," illustrated edition, is now out of print. Babington's "Botany" would serve your purpose best.

Information Supplied.

99/34. **Oil for Bicycle Lamps.**—In reply to a query on this point, my experience is that sperm oil is the best, and it is also a good lubricating oil. It possesses an advantage which is obvious, especially if going on long journeys. A mixture of equal parts of sperm and paraffin and 2 per cent. camphor also gives a good light, and is rather cheaper than sperm alone. TYX. (102/60.)

112/42. **Seltzogene Charges.**—D. Fevre gives for 5-pint machine:—

Soda	℈ 32 = ʒx. ℥ij.
Acid	℈ 26 = ʒviij. ℥ij.

somewhat less than those given by you.—J. BOYLE.

Information Wanted.

[*Replies to the following requests are solicited by correspondents of* THE CHEMIST AND DRUGGIST.]

105/23. *Domum* wishes to know how to make a mercury clock. They were brought out some twenty years ago in London, under the name of "The Everlasting Clock," price 1*s.* He thinks that they might make a nice novelty.

"THE HOUSE OF PEARS."

SOAPMAKERS TO THE PRINCE OF WALES.

Established 100 Years.

A VOICE FROM THE TRADE.

To the Editor of "The Chemist and Druggist."

Sir,—As a retail chemist and druggist, I should like to add a line to the notice of Messrs. Pears' establishment in your last issue.

It is quite natural that a journalist should make the most of the success of so advertising a firm; but, for my own part, I believe Messrs. Pears' success lies, to a considerable extent, in their uniformly just and liberal business policy in their transactions with the retail trade. I have dealt with them over twenty years. Of them a retailer may buy a not very large parcel (£5 gross) at the same rate as the large houses pay for, say, a £1,000 order. *Some years ago the large stores combined to boycott the firm for this*, and supplied their customers with a substitute made for this purpose. This did not do, and the stores were compelled very soon to return to the genuine article.

The soaps sent out by Messrs. Pears are always good alike. They have repeatedly referred to me individuals who have sent their orders direct to the firm. They always send a reminder of the dates when payments are due, and, in short, after a rather wide business experience, I consider them a *model wholesale house*. I think this word rather magnanimous on my part; they have just refused me a second card of "Bubbles."

Yours obediently,

Redhill. THOMAS PADWICK.

CRESCENT

BRAND.

BICARBONATE OF SODA,

REFINED AND RECRYSTALLIZED.

PURE AND CHEAP.

ANALYSIS.

Bicarbonate of Soda	97·20
Mono Carbonate of Soda	1·90
Sulphate of Soda	trace
Chloride of Sodium	·035
Moisture	·82
Insoluble	nil

PURE ALKALI,

GUARANTEED 58 DEGREES,

EQUAL TO 98 PER CENT. OF CARBONATE OF SODA.

Most economical form of Soda for the use of Printers, Bleachers, Dyers; Glass, Paper, and Soap Makers.

SODA CRYSTALS

OF THE FINEST QUALITY.

BRUNNER, MOND & CO., LIM.

Manufacturers of Soda by the Ammonia Process (Solvay's & Mond's Patents),

NORTHWICH, CHESHIRE.

ARTHUR S. HILL & SON

(ESTABLISHED A.D. 1755),

Wholesale and Export Druggists and Manufacturing Chemists

101 & 103 SOUTHWARK STREET, LONDON.

SELECTED DRUGS, PURE CHEMICALS, & PHARMACEUTICAL PREPARATIONS.

PRICE LIST ON APPLICATION.

LOFTHOUSE & SALTMER,

MANUFACTURING CHEMISTS, WHOLESALE AND EXPORT DRUG MERCHANTS,

HULL,

Manufacturers of all Pharmaceutical Preparations on the best and most improved principles. Quotations on Application

DEALERS IN PURE CHEMICALS

For Medicinal, Photographic, and Commercial purposes.

Importers of Cod Liver, Castor, and Olive Oils; Extra Super Essence of Lemon and Bergamot; Otto de Rose, and all Essential Oils; Valentia Saffron; Vanillas; Fruit Essences; Carmine; Aniline Dyes; Bees' Wax, &c., &c.

Special Agents for Sicilian Sublimed Sulphur in 2-cwt. bags, and Rolled Sulphur in 3-cwt. casks. Most Favourable Quotations can be given on application.

SULPHATE OF QUININE

(GOLD AND SILVER BRAND)

QUININE FACTORY AUERBACH

(DR. SEYFERTH).

Certified by Professor Fresenius, of Wiesbaden, as equal to the best preparations of other marks.

THE FACTORY SUPPLIED THE
RUSSIAN, AUSTRIAN, and DUTCH GOVERNMENTS
during last Season.

DEUTSCHE GOLD AND SILBER SCHEIDE ANSTALT

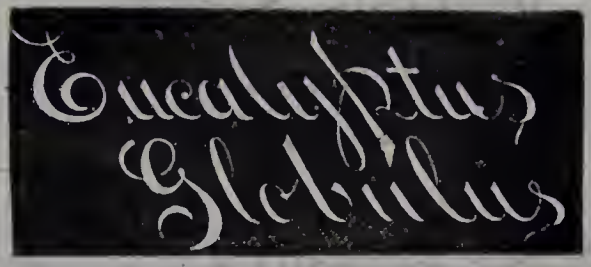
(VORMALS ROSSLER),

FRANKFORT-ON-MAINE

CYANIDE OF POTASSIUM,
IODIDE OF POTASSIUM,
BROMIDE OF POTASSIUM,
NITRATE OF SILVER,
CHLORIDE OF GOLD,
SULPHOCYANIDE OF BARIUM,

IRON Reduced by HYDROGEN,
TARTARIC ACID,
HYDROCHINON,
STRONTIA,
MAGNESIA, and ALL OTHER CHEMICALS for PHOTOGRAPHIC and PHARMACEUTICAL PURPOSES, of the Best Quality.

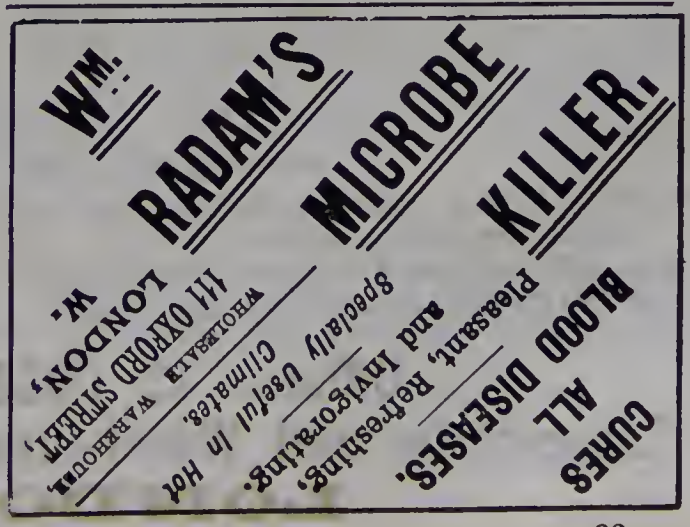
Sole Agents—**OSCAR ANDREAE & CO.**
26 Great Tower Street, LONDON, E.C.



We distil pure oil of Eucalyptus GLOBULUS (which contain 66 per cent. of Eucalyptol, far in excess of any other variety) as a by-product in the manufacture of our Eucalyptus Boiler Fluid, and are therefore, enabled to place it in quantities at a much lower rate than has heretofore been asked for it.

DOWNIE B. I. P. CO.

4 REDCROSS STREET, LIVERPOOL; and
204 MARKET ST., SAN FRANCISCO.



BURGOYNE, BURBIDGES.

ESTABLISHED OVER 140 YEARS.

CYRIAX & FARRIES.

WHOLESALE & EXPORT DRUGGISTS.

Manufacturers of

Pharmaceutical Preparations.
Counter Requisites.
Commercial & Fine Chemicals.
Photographic Chemicals.

IMPORTERS & DISTILLERS OF ESSENTIAL OILS.

Dealers in

Druggists' Sundries.
Patent Medicines.
&c., &c.

Chemical and Pharmaceutical Apparatus.
Surgical Instruments.
&c., &c.

SPECIALITIES.

SOLUBLE PODOPHYLLIN (in Scales).

A definite combination of the active resins of Podophyllin rhizome; soluble in water, proof spirit, or glycerine. An accurate, agreeable, and convenient form in which to administer the drug.

MONOBROM-ACETANILIDE (BURGOYNE'S).

ORIGINALLY PREPARED BY US.

Contains 37 per cent. of Bromine; odourless, tasteless, soluble in alcohol. Designed to combine the sedative effect of Bromides with the antifebrile properties of Acetanilide (Antifebrin). Useful in neuralgia, rheumatism, &c. Dose, 1 to 2 grains every three hours.

MALTOPEPSYN.

Possesses digestive power ten times greater than the best Pepsin in the market; digests fibrin and casein, emulsifies fats, converts starch into glucose. A combination of all the digestive principles with the nutritive qualities of Malt Extract and the nerve-invigorating properties of the Acid Phosphates.

SOLUBLE ESSENCES.

Of rich and excellent flavour and great strength; perfectly miscible with water, forming bright solutions. Specially suitable for cordials and for aërated beverages.

WHOLESALE DEPOT FOR

PARKE, DAVIS & CO.'S Fluid Extracts, Pharmaceutical Preparations, &c., &c.
DE LAIRE'S Vanilline, Heliotropine, Coumarine, &c.
CHANTEAUD'S Seidlitz and Dosimetric Granules.

THE RIO CHEMICAL CO.'S Aletris Cordial, Celerina, and Pinus Canadensis.
VON HEYDEN'S Salicylic Acid and Salts.

Offices: 12 COLEMAN STREET;
Laboratories and Warehouse: 16 COLEMAN STREET,
LONDON, E.C.

SIR JAMES MURRAY'S

PURE FLUID MAGNESIA.

As Prepared by the Discoverer, SIR JAMES MURRAY, M.D.

FOR OVER 60 YEARS IN USE AS AN EXCELLENT REMEDY FOR ALL DISEASES OF THE STOMACH AND LIVER.

In Summer time, and in warm climates, it is invaluable, as it cools the Blood and improves the system generally.

It is the only known Drug which cures that most unpleasant of all maladies, viz., a HEADACHE. In cases of Gout and Indigestion it is indispensable.

AND IN THE NURSERY IT IS INVALUABLE. SPOKEN OF MOST HIGHLY BY ALL THE PROFESSION.

Sold by all respectable Chemists, in **Large sized** Bottles (the 1s. size containing nearly **Double the Quantity** usually sold at that price), at **1s., 2s. 6d.,** and **3s. 6d.** each. Also in Winchester Quarts for Dispensary and Hospital use.

☞ CAUTION.—Observe the SIGNATURE of the Inventor on EVERY LABEL.

SIR JAMES MURRAY & SON, CHEMICAL WORKS, **TEMPLE ST., DUBLIN.**

Wholesale Agents—BARCLAY & SONS, 95 Farringdon Street, London.

"SPECIALITIES" OF WIDE REPUTATION

Suitably Packed for Home and Export, in various Languages, for all Markets.

'COAGULINE' The Best Cement for all Broken Articles.

LINSEED, Chloro.-Linseed and Throat Lozenges, Jujubes, &c.

CUE CEMENT, Cue Tips, Wafers, FIXERS, CHALKS, &c.

'LAVA', A fusible imperishable CEMENT. Patent Glass Valve Tubes, For Feeding Bottles.

ABSORBENT COTTON WOOL.

COMPOUND ESSENCE OF LINSEED, Aniseed, Senega, Squill, Tolu, &c.

THE Stockport Remedy FOR COUGHS AND COLDS.

OXYMEL SCILLÆ (exceptionally brilliant) Dec. Senegæ Co. Concr.

PHOSPHOSACCHARITE.

GLYCERLINE. *Linum Glycerinum.*

'SAPO-LINI' (Saponified Linseed Jelly).

A Perfumed EMOLLIENT **TOILET SOAP.**

EMOLLIENT For Chapped Hands, &c.

ELASTIC STOCKINGS, KNEE CAPS, SOCKS, ETC.

MERRICK'S PATENT BELTS, For Abdomen, Back, &c.

CHEMICAL DISINFECTANT. **BIRD LIME.**

GUN COVER and CARRIER. "THERMONE," or HEAT RADIATOR.

TIC PILLS, LINUM CATHARTICUM PILLS, Aspinall's PILLS, &c.

Prices, Circulars with Name and Address, Specimens, Show Cards, Glass Tablets, &c., &c., on application.

KAY BROTHERS LIMITED, Laboratory and Works, ST. PETERSGATE MILLS, **STOCKPORT,** Founded A.D. 1786. Incorporated 1887.

Trade Notice.] [Trade Notice.

ATKINSON & BARKER'S

ROYAL INFANTS' PRESERVATIVE.

Established by 90 years' experience as a safe and effective Medicine.

Sold universally by Chemists and Patent Medicine Dealers.

WHOLESALE AND EXPORT ORDERS SUPPLIED FROM THE MANUFACTORY—

11 RUSSELL STREET, DOWNING STREET, MANCHESTER.

SHOW CARDS AND BILLS ON APPLICATION.

WYLEYS & CO.

MANUFACTURING CHEMISTS

AND

DRUG GRINDERS.

WAREHOUSES, LABORATORIES, AND DRUG MILLS,

COVENTRY.

CITRATE OF MAGNESIA.

A good reliable quality, in 1-cwt. tins ... ... per cwt. 68/-
Or in 4-lb. or 7-lb. bottles ... ... " 70/-
Extra Quality, containing an additional amount of Citric Acid... ... ... per lb. 11*d.*

Superior Grades at 1/2 and 1/4 per lb.

EFFERVESCENT SALINE

(CHLORATED).

Price 1/2 lb.

A PERFECTLY DRY AND FINE POWDER.

The above may also be had with 5 per cent. extra Sulphate of Magnesia at same price if ordered as

EFFERVESCENT SALINE APERIENT.

RASPBERRY CITRATE.

Price 1/- lb.

A thoroughly satisfactory make of this now popular article.

ALSO:

LEMON CITRATE,

Price 1/- per lb.

LIME FRUIT CITRATE,

Price 1/- per lb.

DESCRIPTIVE LABELS (without name), 8d. per 100.

BARRON, HARVEYS & CO.

GILTSPUR STREET, LONDON, E.C.

Beg to inform their friends and the Trade generally that, having purchased the Business of

BARRON, SQUIRE & CO., BUSH LANE,

and also the various Formulæ of the Special Preparations of

JAMES BASS & SONS, HATTON GARDEN,

they are prepared to execute orders for the same, and pledge themselves to supply them in all their integrity.

Specimens of these Preparations have remained in the Museum of Kew Gardens during 23 years without deterioration.

BUYERS ARE CAUTIONED TO SEE THAT THEY GET THE

GENUINE

DR. JOHN HOOPER'S PILLS,

Which may be known by the Name of the Inventor being on the Government Stamp.

Handbills and Show Cards will be sent on application to

MAY, ROBERTS & CO., 9 CLERKENWELL ROAD, LONDON, E.C.

AMERICAN BUYERS are particularly Cautioned ! !

Telegraphic Address—"FEEDING BOTTLES LONDON."

G. F. COWARD & CO., WHOLESALE DRUGGISTS & PERFUMERS,

PRIZE MEDAL FOR SEIDLITZ POWDERS.

20 (late 51) LITTLE BRITAIN, LONDON, E.C.

PRIZE MEDAL FOR ESSENCES.

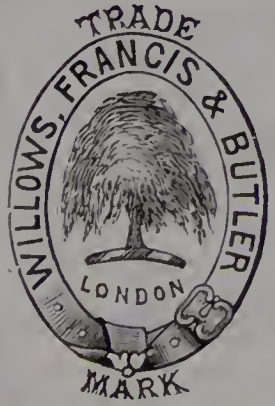
PRIZE MEDAL IMPROVED SEIDLITZ POWDERS.

Improved Soda Water and Ginger Beer Powders. Genuine Medicines in Stoppered Bottles. Essence of Jamaica Ginger, Chamomile and Ginger, and Peppermint. Celebrated Jamaica Pomatum in Fancy Pots.

Special Quotations to Export Merchants and Shippers. Price Lists free on application.

OXY-IODINE COMPOUNDS.

AS SUGGESTED BY DR. HUGH WOODS.



Liq. Calcis Iodinatæ.—A solution of Hypoiodite of Calcium. Very effective in curing Gout, Rheumatism, Syphilis, Strumous or Tubercular Disease, Goitre, &c. Highly antiseptic and deodorant. Dose—M. v to xx. Price, 4-oz. bottles, 1/2; 8-oz., 2/; 16-oz., 3/6.

Liq. Potassæ Iodinatæ.—A solution of Hypoiodite of Potassium. An extremely powerful, safe, and unirritating antiseptic. Useful in same diseases as above. Cures parasitic and other skin diseases. Dose—M. v to x. Price, 4-oz. bottles, 1/4; 8-oz., 2/4; 16-oz., 4/.

Red Oxyiodide of Bismuth.—Very superior to Iodoform. Odourless and unirritating. Powerfully antiseptic. Cures wounds, sores, eczema, intertrigo, chapped hands, sweating feet, &c. Price 1/6 per oz.; ointment (1 in 10), 3/6 per lb.

Yellow Oxyiodide of Bismuth.—An excellent antiseptic application to the throat, nose, &c. Very valuable for internal use in cancer of the stomach, gastric ulcer, dyspepsia, vomiting, &c. Dose—5 to 20 grains. Price, 1/4 per oz.; ointment (1 in 10), 3/ per lb.

Leaflets descriptive of above, and monthly price current, on application. Special terms to Hospitals and Public Institutions.

WILLOWS, FRANCIS & BUTLER, WHOLESALE AND EXPORT DRUGGISTS,

ESTABLISHED 1751,

101 HIGH HOLBORN, LONDON, W.C.

DURBAN, NATAL.

THE NATAL DRUG CO., Ld.

(Late Bentley & Vanderpump),

WHOLESALE DRUGGISTS,

IMPORTERS, AND MANUFACTURING CHEMISTS.

AGENCIES undertaken for the Sale of PROPRIETARY ARTICLES, and other Goods suited to the SOUTH AFRICAN MARKETS.

LONDON AGENTS:

DAVIS & SOPER, Bury Street, St. Mary-Axe, LONDON.

Telegraphic Address—"REPOSNOS LONDON."

DURBAN, NATAL.

PURE

CARBONATE OF LITHIA.

and all other Lithia Salts.

MERCURIALS

Calomel, Corrosive Sublimate, Oxides, &c.

IODOFORM

Chloral, Terpene, Osmic Acid, Tannin, Tartar Emetic

LIQUID CHLORIDE OF METHYL, for the treatment of Rheumatism, Neuralgia, &c.

GRAND PRIX, PARIS EXHIBITION, 1889.

Wholesale from FUERST BROS., 17 Philpot Lane, London, E.C.

Sole Agents for BILLAULT, Rue Sorbonne, PARIS.

N.B.—Stock of the above kept in London.

Telegrams, "Fuerst," London. Telephone No. 1050.

PURE TARTAR EMETIC.

PURE OXIDE OF ANTIMONY.

Showing 98 per cent. of anhydrous Sb_2O_3.

This product is obtained BY A NEW PROCESS, and is offered at VERY ADVANTAGEOUS PRICES.

POULENC FRÈRES,

92 Rue Vieille du Temple, PARIS.

Grand Prize, Universal Exhibition, Paris, 1889.

FREDK. BOEHM,

BILLITER SQUARE BUILDINGS,

LONDON,

Manufacturers' Agent & Importer of the following

CHEMICALS

Acetate of Lead. Permanganate of Potash.
Muriate of Ammonia.
Glycerine. Alcohol. Ethers. Chloroform. Acetanilide.
Boracic, Lactic, Tannic, Tartaric Acids.
Hypo-Soda. Oxalate of Potash. Hydroquinone.

PRICE LIST ON APPLICATION.

FOREIGN SPECIALITIES & MEDICINES.

REVISED PRICE LIST.

ROBERTS & CO.

FOREIGN AND ENGLISH CHEMISTS,

WHOLESALE, IMPORT, AND EXPORT AGENTS FOR

FOREIGN MEDICINES AND PATENTS,

76 NEW BOND STREET, LONDON.

Messrs. Roberts & Co. beg to inform the Trade that they are Agents for all the principal French and Foreign Specialities and Medicines, a large supply of which they have always on hand, and can supply on very favourable terms. They are in daily communication with their Paris House, and can offer exceptional facilities for procuring New Medicines, &c., &c., with very little delay. The following is a list of a few that they name *au hasard*, and that have a large sale:—

Retail	Per doz	Retail	Per doz.	Retail	Per doz.	Retail	Per doz
4/6..Alcool de Menthe Ricqlès	41/6	4/6..Capsules Matico	35/	9/..Laville's Gout Tincture	81/	2/9..Rabuteau's Syrup Ferrug.	24/6
2/9 Ditto ditto	21/	4/6.. „ Mathey Cayius	35/	9/.. „ „ Pills	78/	4/0..Racahout des Arabes	31/
2/9..Aubergier's Syrup	27/	4/6..Chassaing's Wine	39/	1/1½ Papier Fayard	6/9	4/6..Reynal's Bougies	38/
1/9.. „ Pâté	15/	2/9.. „ Pills	24/	2/3.. Ditto	13/6	2/9..Ricord's Injection	24/
6/6..Bay Rum	57/	4/6..Cilin's Dragées Bromide Cam.	45/	2 3..Papier Fruneau	14/6	4/6.. „ Capsules	36/
3/6.. Ditto	31/	5/ ..Eau de Botot (Genuine)	40/	4/ .. Ditto	24/6	9/ .. „ Syrup	90/; 4/6; 42/
2/ ..Belloc's Charcoal	15/	3/ .. Ditto	24/	1/9..Pâté d'Aubergier	15/	1/6 Star Paper	11/
1/9.. „ Lozenges	15/	2/ ..Espic's Cigarettes	13/6	1/9.. „ de Berthé	15/6	1/9..Vallet's Pills	14/6
4/6..Blancard's Pills	32/	4/6..Elixir de Coca (Mariani)	48/	2/9.. „ de Coca Mariani	25/	2/9.. Ditto	23/
2/6.. Ditto	18/	2,9..Fiou's Syrup	23/	1/9.. „ de George	14/6	4/6..Veloutine (White, Pink, Olim.)	28/
4 6 .Bron's Injection	27/	..Gayetty's Paper		1/1½ „ Ditto	9/	3/6.. Ditto ditto	22/
4,6..Bugeaud's Wine	36/	2/3..Granules Arsen. Acid	13/6	1/6.. „ de Nafé	13/6	4/6..Valentine's Meat Juice	34/
3,6..Bully's Vinegar	30/	2/9.. „ „ Iron	14/5	1/9.. „ Regnauld	14/6		£19/10 gross.
2/ .. Ditto	14/6	2/9.. „ „ Soda	15/4	7/ ..Pieriot's Valerian	60/	2/9..Vichot's Trochisques	22/
1/6..Cande's (Lait Antéphilig.)	36/	2/9..Grimault's Syrup Lime	24/	2/9..Rabuteau's Drgées Ferrug.	24 6	4/6..Vin Mariani	36/
4/6..Capsules Bromide Camph.	45/	2/3..Guyot's Liq. Gonoron	18/	7/0.. „ Elixir Ferrug.	65/		

Sole European Agents for Battle & Co.'s Bromidia and Iodia, and Blount's Oil of Tar. Special Agents for Lambert's Listerine, Valentine's Meat Juice Mack's Pumilio Pine Products, and Mariani's preparations. Special Quotations in large quantities.

MM. Roberts & Cie. ont l'honneur d'informer MM. les Pharmaciens Spécialistes de France et de l'Etranger qu'ils se mettent à leur disposition pour des dépôts qu'ils voudraient établir à Londres. On peut avoir tous renseignements en s'adressant à leur maison de Londres ou à Paris.

SPECIAL AGENTS FOR MARIANI'S ELIXIR, EXTRACT PATE, PILLS, SYRUP AND WINE OF COCA, AND FOR VALENTINE'S MEAT JUICE AND LE GRAND'S ORIZA PERFUMERY.

Established] House in Paris: ROBERTS & CO., Rue de la Paix 5. [1823.

THE CHEMISCHE FABRIK AUF AKTIEN,

Vormals E. SCHERING, BERLIN,

MANUFACTURERS OF PURE CHEMICAL PRODUCTS

AND PATENTEES OF

CHLORALAMID

SEE "BRITISH MEDICAL JOURNAL," 14 DECEMBER, 1889.

Declared by the highest medical authority in this country to effect sound and comfortable sleep better than any of the Hypnotics which have been introduced during the last few years.

DOSE, FROM 30 TO 50 GRAINS.

Important to Dispensers.—Tell the patient to dissolve the Chloralamid in Whisky or Brandy, and afterwards add cold water to taste.

DO NOT APPLY HOT WATER TO DISSOLVE OR THE PREPARATION WILL DECOMPOSE.

Full particulars for Medical Practitioners and Dispensing Chemists, giving also interesting Clinical Reports, will be sent Post Free.

This Preparation, securing sleep without any ill effects, neither interfering with the activity of the heart, respiration, temperature, digestion, or urine secretion, will not fail to be the most favourite Hypnotic of the future.

Wholesale Drug and Chemical Houses may obtain Schering's Chloralamid from

A. & M. ZIMMERMANN, LONDON

SOLE WHOLESALE AGENTS.

PARIS EXHIBITION, 1889.

PRIZE MEDAL AWARDED TO

"SALVO PETROLIA"

(VASELINE).

Absolutely Genuine Paraffinum Molle of the very Purest Form, and we claim that it is superior to Vaseline.

Packed in Tins, 1, 4, 10, 14, 28, 56, and 112 lbs.

"OLEUM DEELINÆ"

(REGISTERED).

Universally adopted by the Medical Profession

FOR

OPHTHALMIA, SCURVY, RINGWORM, ECZEMA, SKIN DISEASES,

FOR

EXTERNAL & INTERNAL IRRITATION

OF EVERY KIND.

PACKED IN CASES—

One Doz. 1s. 6d. Bottles; One Doz. 2s. 6d. Bottles or half of each.

TESTIMONIALS MAY BE HAD UPON APPLICATION.

"EDIBLE SALVO PETROLIA"

For Public Speakers, Actors, & Singers.

1*s.* 6*d.* per Tube.

The above are Manufactured Solely by the Proprietors,

THE DEE OIL COMPANY,

LIMITED.

Works—SALTNEY, CHESTER.

OFFICES:

LONDON — 38 LEADENHALL ST., E.C.

Liverpool, Dublin, Manchester, Glasgow, Hull, Cardiff, Bristol, Belfast, Barrow-in-Furness, Nottingham, Paris, Hamburg, &c.

40

H. P. TRUEFITT'S SPECIALITIES FOR THE HAIR.

Floral Extract, 3/6, 5/-, 10/6, 21/-
Egg Julep, 2/-, 4/-.
CONCENTRATED Egg Julep, 2/6, 5/-, 10/6.
Goldeo Fluid, 10/6, 21/-.
EUXURON, 1/6.
&c.

EUCHRISMA. Combines in one clear Fluid every Valuable Component both of a Hair Grease and Wash, 3/6, 5/-, 10/6, 21/-.

EAU RACINE. For renewing the original colour of Grey Hair; superior to all other Restorers, being perfectly simple in its Components. Price 6/-.

Stimulating Lotioo, 5/-, 10/6.
Astriogent aod Tonic Lotioo, 5/-, 10/6.
Quinine aod Aroica Hair Wash, 3/6, 5/-, 10/6, 21/-.
Arnica Wash 3/6, 5/-, 10/6.
&c.

An elegant Preparatioo for the Hair and Beard. Price 2/6, 3/6, 5/-, 10/6, 21/-.

BRILLANTINE.

H. P. TRUEFITT'S TONIC TOOTH BRUSH

(BY ROYAL LETTERS PATENT.)

PRICE ONE SHILLING.

20 & 21 Burlington Arcade; 13 & 14 Old Bond St., London.

EWEN'S LARD

IS

GUARANTEED PURE.

EVERY GENUINE PACKAGE BEARS THEIR LABEL

Trade Mark.

Facsimile of Label.

EWEN'S

Clarified Fat Works, Perfumery and Toilet Soap Factory,

5 HATFIELD STREET, LONDON, S.E.

Trade Mark.

Facsimile of Label.

Trade Mark. Registered.

THE

ASSOCIATION for the SUPPLY of PURE VACCINE LYMPH,

12 PALL MALL EAST, LONDON, S.W.

SOLE AGENTS FOR DR. WARLOMONT'S CALF VACCINE.

Tubes, 2*s.* each; Half Tubes, 1*s.* each. Pomade in vials, 5*s.*

HUMAN VACCINE, from healthy children only, microscopically examined and source quoted. Tubes, two-thirds full, 1*s.* 8*d.* each; Tubes one-third full and Lancet-charged points, 1*s.* each; Pin-points, 1*s.* 1*d.* each. Eighteen charged Small Points, 5*s.* Tubes, two-thirds full (same as those mentioned above, but without source), in quantities for export, £5 per 100 Tubes. Pin-points uncharged, 1*s.* per dozen. Vaccine Ejectors, 1*s.* 3*d.* each, including postage. Vaccinations by appointment. P.O.O.'s (including postage, and crossed London and Westminster Bank) with orders, payable to EDWARD DARKE *Secretary.*

Office hours, 10 to 4. Saturdays 10 to 2.

COOK'S ANTISEPTIC SOAP

(THOMSON'S PATENT),

Has been tested in a Physiological Laboratory as a Germ Destroyer, and proved to be more efficient than any other experimented with. (*See* "Journal of Chemical Industry, 1888, No. 3.) Of great value in CASES OF

ECZEMA, RINGWORM, SCABIES, FAVUS

AND OTHER SKIN DISEASES.

See "The Lancet," 12 May, 1888, page 936.

Price in 3-Tablet Boxes, per doz. **12/-**; Selling Price, **1/6**; in ¼-gross Boxes, **10/6** per box.

GOLD MEDAL, PARIS EXHIBITION, 1889.

Can be obtained through MESSRS. S. MAW, SON & THOMPSON, LONDON, or of

EDWARD COOK & CO., HOUSEHOLD and TOILET **SOAP MAKERS. LONDON, E.**

R C TREATT

Dunster House Mincing Lane
LONDON

IMPORTER OF

Musk Civet Ambergris Attar-of-Rose

ESSENTIAL OILS

Wholesale and Export only.

APPLICATION. ON QUOTATIONS AND PRICE LIST

E. C. Z. A.

THE NEW SKIN SOAP,

MADE ONLY BY

BAYLEY & CO., 17 COCKSPUR ST., LONDON,

THE SOLE AND ORIGINAL MANUFACTURERS OF

"ESS. BOUQUET" PERFUME and of the Celebrated "SPERMACETI SOAP TABLET."

EDWARDS' INSTANTANEOUS HARLENE

HAIR PRODUCER & RESTORER.

NOTICE.

Chemists, Hair-dressers and Perfumers, &c., selling our "Spécialité," will oblige by writing for Show Cards, Counter Bills, &c., forwarded free.

EDWARDS' HARLENE,
1/-, 2/6, 3/6, and **5/6** per Bottle.

Liberal Terms to Shippers and the Trade. Terms, and all other Particulars on application.

EDWARDS & CO.

5c NEW OXFORD ST., LONDON, W.C.

PUREST OTTO OF ROSE.

BRAND—
"S. SERAPHIMOFF,"
Distiller & Exporter,
KEZANLIK, BULGARIA

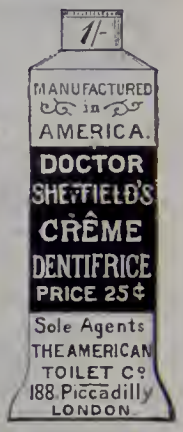
SOLE CONSIGNEES—

FUERST BROS.
17 PHILPOT LANE, LONDON, E.C.

Telegrams—"Fuerst London." Telephone No. 1050. [3]

"Second to none." All buyers desiring absolute purity and guaranteed excellence should write for Samples and Prices.

AMERICAN "CRÊME" TOOTH PASTE.



Vast is the difference between a "Crême" Tooth Paste and a Tooth Paste. Americans have used the above for 15 years. It is the only "Crême" Tooth Paste sold in England. It cleanses the Teeth, perfumes the Breath, and removes Tartar.

CHINA JARS, 2/- SILVER TUBES, 1/-

The beautiful way in which the "Crême" Tooth Paste is "got up" alone secures its sale. There is not another preparation in the United Kingdom which is turned out so well. Show Cards and Circulars with all orders of 1 Dozen upwards.

SPECIAL OFFER TO AGENTS.

With *every* dozen full-sized Tubes or Jars ordered in first order, we will *give* 1 dozen Sample Tubes or Jars. The samples are ½-size facsimiles. Write for Special Terms and Samples.

OF ALL WHOLESALE HOUSES, OR

THE AMERICAN TOILET COMPANY, 188 Piccadilly, LONDON, W.

SALVINE.

THE SCIENTIFIC DENTIFRICE.

OF ALL WHOLESALE HOUSES.

This Preparation has been especially designed by an eminent London Dental Surgeon, after a long series of careful experiments, to Prevent Decay of the Teeth in addition to beautifying them.

SALVINE is the only Dentifrice that is an Ant-Acid and Anti-Parasitic. Put up in a novel and attractive manner. Price 1/, 1/6, and 2/6.

LIBERAL TERMS.

A handsome, valuable Showcard of an exceedingly tasteful and high-class design, now ready. Transparencies and other attractive Advertising matter.

SALVINE DEPÔT, 3 Oxford St., LONDON, W.

Matchless for the Teeth, Gums, and Breath.

Sold by all Wholesale Houses.

Dr. W. ZIEMER'S most efficacious

"THE ALEXANDRA" DENTIFRICE.

It Preserves, Beautifies and renders the Teeth perfectly White without injuring the enamel. It Strengthens the Gums. It is most Agreeable as a Mouth-wash, and Sweetens the Breath. It is Invaluable to Smokers. Prices: 1/3 size, 9/; 2/ size, 15/; 3/6 size, 24/ per dozen.

Sole Proprietors: **B. W. ZIEMER & CO., 143 Cannon Street, London, E.C.**

BEST AND SAFEST

DENTIFRICE

RETAIL—
No 0 Loose .. 0s. 8d. each.
" 1. In tins 1s. 0d. "
" 2. Glass .. 2s 6d. "

Wholesale of all the leading houses throughout the world.

OVER 2,000 TESTIMONIALS

This old-established and celebrated preparation for the Teeth attractively put up in the form of Liquid, Powder, and Paste, is now being largely advertised to the public.

THE GENUINE
EAU DE BOTOT
IS THE ONLY DENTIFRICE APPROVED
By the Academy of Medicine of Paris.

	Size	Size	Size
EAU de BOTOT ..	1/6,	11/9;	2/6, 20/: 5/, 32/9 doz
POWDER	1/,	8/6;	2/6, 17 doz.
PASTE	1/,	8/6;	2/6, 17/ "

Of all Wholesale Houses.

SAMPLE BOXES, Containing Powder, Paste, & Liquid, per 8/- doz.

N.B.—See each Article has the Signature— M. Botot

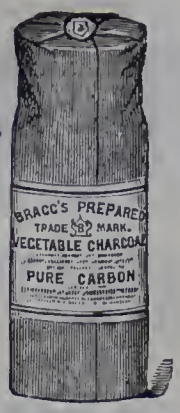
BRAGG'S

Sold in Powder, 2/-, 4/-, and 6/- bottles; also in Biscuits, 1/-, 2/, and 4/- tins (Children like these), and in Lozenges, 1/1½ tins (portable and convenient).

Undoubtedly the most natural preventative and curative agent in all cases of Indigestion, Disorders of the Liver, Fevers, Cholera, Dysentery, &c.

The trade cannot do better than keep these old-established and safe preparations under the notice of their customers.

VEGETABLE CHARCOAL.



SOLE MANUFACTURER—

J. L. BRAGG, 14 WIGMORE ST., LONDON.

SHOW CARDS AND COUNTER BILLS ON APPLICATION.

TRADE MARK.

KANGRA VALLEY
INDIAN TEA GROWERS' ASSOCIATION.

French & Langdale, 14 St. Dunstan's Hill, London, E.C.

Guaranteed to be Absolutely Pure, as supplied to Europeans in India.

Packed in 1-lb., ½-lb., and ¼-lb. Metallic Air-tight Packets.

No. 1, Orange Pekoe, at 3/10 per lb. No. 2, Pekoe, at 2/10 per lb. No. 3, Pekoe Souchong, at 2/4 per lb. No. 4, Souchong, at 1/10 per lb.

Export Prices in Bond, 4d. per lb. less than above, in Chests of 50 lbs. and upwards, shipped free of charge. 50 lbs. Carriage Paid. No Travellers employed. Wholesale Terms and Tasting Samples on application.

These Teas are recommended to Chemists not only on account of their Purity, but because they are Less Astringent than other Indian Teas.

ROWNTREE'S

The "MEDICAL PRESS AND CIRCULAR":—
"Certainly this preparation is of delicate flavour . . . It is perfectly soluble . . . the small quantity required for the *immediate* production of a cup of excellent cocoa will ensure for this 'Elect Extract' a favourable reception at the hands of persons of weak digestion, and all who prefer this wholesome beverage to tea and coffee.

The "BRITISH MEDICAL JOURNAL" says:—
"Rowntree's Cocoa Extract is one of the best. Its flavour and aroma are good. Cocoa thus prepared is one of the most digestible articles of food."

YORK, ENGLAND.

MILLAR'S BRITISH WINES.

ORANGE (suitable for Quinine), GINGER, RAISIN, COWSLIP, CHERRY, &c.

A. MILLAR & CO., Thomas Street, DUBLIN.

Sole Agents for London and District—H. J. ROYDANT & CO., 75 Acre Lane, Brixton, S.W.

WEDGWOOD ACID-PROOF

MORTARS AND PESTLES.

ALSO MANUFACTURERS OF

Funnels, Evaporating Pans, Electric Battery Fittings, Bed Pans, Urinals, Medicine Spoons, Physic Cups, Sick Feeders, Bleeding Basins, Medicine Measures, Eye Cups, Inhalers, Nursery Lamps, Wall Tiles, &c.

PRICE LIST ON APPLICATION. SPECIAL QUOTATIONS FOR LARGE ORDERS.

Any Article not bearing the Stamped Trade Mark "WEDGWOOD" is not made by us.

JOSIAH WEDGWOOD & SONS, ETRURIA, STOKE-ON-TRENT.

London Rooms: ST. ANDREW'S BUILDINGS, HOLBORN CIRCUS.

TOBACCO AND CIGARS.

MIXED PARCELS.

EVERY REQUISITE FOR THE SMOKER IN ONE ORDER.

The following Manufacturers' Packet Tobaccos supplied at their List Prices, CARRIAGE PAID:—

Wills, Cope, Hignett, Gallaher, Taddy, Ogden, Phillips, Player, Murray, Archer, Clarke, Brankston, Kennedy, Morris, Mitchell, Smith, Hodge, Lambert & Butler, Pace, Goodwin, Duke, Kinney, Kimball, Richmond Cavendish Company, Carroll, Lorrilard, &c., &c.

HAVANA, MEXICAN, MANILLA, INDIAN, AND SWISS CIGARS & CHEROOTS at Importers Prices.

The CIGARETTES of the following Firms, at List Prices:—

Goodwin, Allen & Ginter, Kinney, Duke, Kimball, Au Bon Fumeur, Wills, Player, Lambert & Butler, Cope, and the Leading Egyptian and Turkish Houses.

BRITISH CIGARS, from 4s. to 20s. per 100. All carefully selected and well matured.

The largest and most varied Stock in the Kingdom to select from.

Irish Roll, Pigtail, Nailrod, Target, Cake, Plug, and all other Hard Tobaccos; also Flakes, Shags, Virginias, Cut Cavendish, and every description of Plain and Fancy Cut Tobaccos of standard quality at lowest prices.

Tobacconists' Fancy Goods and Smokers' Sundries of every description at Current Rates.

Carriage Paid on Parcels from £2 upwards to any Station in the United Kingdom. Send for Detailed Price Lists.

SINGLETON & COLE, LD., TOBACCONISTS' FACTORS, TOBACCO, SNUFF, AND CIGAR MANUFACTURERS AND IMPORTERS,

Cannon Street and Fore Street, **BIRMINGHAM.**

"LA JOYA" This First-Class Brand of English-Made Cigars

IS MANUFACTURED SOLELY BY

M. & R. PEACOCK,

TOBACCO, CIGAR, SNUFF, AND CIGARETTE MANUFACTURERS,

Who will be pleased to send a sample FREE to any address in the United Kingdom on application.

A box of 25 (as in margin) for 5/, or a box of 50 for 9/, on rece of Postal Order or Stamps, carriage paid.

The only Manufacturers of the CELEBRATED "ROYAL CHARTER" TOBACCO.

WHOLESALE PRICE LISTS TO RETAILERS ON APPLICATION.

542 KINGSLAND ROAD, LONDON, N.E. ESTABLISHED 1858.

"MYRTLE GROVE" TOBACCO

In 1-oz., 2-oz., and 4-oz. Packets, and ¼, ½, 1 lb. Tins only.

TADDY & CO., 45 Minories, LONDON

ESTABLISHED 150 YEARS,

SNUFF, TOBACCO, AND SEGAR MANUFACTURERS.

Write for List of Specialities.

ARTIFICIAL MUSK

("MUSK BAUR")

PATENTED IN ALL COUNTRIES.

A NEW AND INVALUABLE DISCOVERY.

As used with great success by the principal Perfumers and Soap Makers in the world, replacing with great advantage the Natural Musk.

For any information concerning Price, Samples, Directions for Use, &c., apply to Sole Vendor—

ANTOINE CHIRIS,

Distiller and Manufacturer of Essential Oils, Pomades, &c.,

GRASSE, FRANCE.

BATH AND FLESH GLOVES

(*A selection of between* 40 *and* 50 *tasteful patterns*).

CHEST PROTECTORS

Of every description.

CORN AND BUNION PLASTERS.

WHOLESALE ONLY OF

SOLPORT BROTHERS, Manufacturers,

68 Shaftesbury St., New North Road, **LONDON, N.**

Silver Medal and Diploma of Honour, Highest Awards Fisheries Exhibition, 1883.
Silver Medal and Diploma of Honour, Highest Awards Health Exhibition, 1884.

SPONGES.

HENRY MARKS & SONS, LIMITED

IMPORTERS, EXPORTERS, AND MERCHANTS,

45 & 46 HOUNDSDITCH, AND 5 GORING STREET, LONDON, E.

AND AT

Hydra and Syra. GREECE. | Symi and Calymnos. TURKEY. | Key West. FLORIDA. | Nassau. WEST INDIES. | Caibarien. CUBA.

ESTABLISHED 1810. Telegraphic Address—"SPONGE LONDON."

Detailed Price List will, on application, be forwarded direct or through Shippers.

BETTS & CO., LIMITED

(ESTABLISHED IN 1840),

SOLE MAKERS IN GREAT BRITAIN OF

METALLIC CAPSULES,

AND PATENTEES OF THE

COLOURED SIDE MARK, LABEL, AND OTHER SPECIALITY CAPSULES

(For the Prevention of Fraud and Refilling of Old Labelled Bottles), as supplied to Bass & Co., Hennessy and Martell Cognac, and the leading Brewers and Bottlers of Wines and Spirits throughout Europe.

PLAIN ORDINARY CAPSULES,

For Small Phials, 2*s.* 6*d.* and upwards per 1,000, according to size, style, design, and quantity.

SPECIAL CONTRACTS FOR CONTINUOUS DEALING.

Manufacturers of Pure English-made Bottling and Package Tinfoil, from 1*s.* per lb. and upwards; **Mixed Foil** (Foreign Quality), from 6d. per lb. (according to gauge); **Patent Barrel Packages and Snuff Canisters, Tea Packages, &c.**

COLLAPSIBLE TUBES AND SPRINKLERS

FOR PERFUMERS AND OTHERS.

MANUFACTORIES:—LONDON: Chief Office and Factories, Wharf Road, City Road, E.C.; and Holloway and Batavia Mills, Holloway, N.W.—BIRMINGHAM: Moor Green Fields.—PARIS: Office, 65 Rue Verrerie.—BORDEAUX: Office, 3 Quai de Chartrons; Factory, Monrépos, Floirac.

PATENTEES OF HYDRAULIC & MECHANICAL PRESSURE CAPSULING MACHINES,

ESPECIALLY ADAPTED FOR CHEMISTS' COUNTERS.

Largely in use by the Trade, and efficiency guaranteed for all sizes of Bottles, at Royalties from 5*s.* to £2 2*s.* per annum:

TURNED METAL FLASK & BOTTLE CAPS

For Spirits, Oils, Perfumes, Salts, &c.

[2]

MANUFACTURERS:

H. G. SANDERS & SON,

Victoria Works, Victoria Gardens, Notting Hill Gate, LONDON, W.

Established 1820. Telegraphic Address—"COLLAPSIBLE LONDON."

M. BAILEY & CO.

MANUFACTURERS OF DRUGGISTS' SUNDRIES.

M. B. & Co. beg to call the attention of the Trade to the following articles manufactured by them:—

Glass Syringes, Nipple Shields, Breast Exhausters, Fittings for Feeding Bottles, Tubes, and Tube Work in all its branches, &c., &c.

Sole Proprietors and Manufacturers of J. Brooks & Co.'s celebrated Specialities:—Winter Cream, Lip Salve, Solidified Camphor Cream, Glycerine Jelly, Perfumery, &c., &c.

Buyers are cautioned against imitations of these World-renowned preparations. None are genuine unless bearing our Registered Trade Mark.

May be obtained through any of the Wholesale Houses. Wholesale and Export only from

M. BAILEY & CO., 32 and 34 Buckingham Road, KINGSLAND, N.

SALICYLIC ACID

PHYSIOLOGICALLY PURE.

MANUFACTURED BY

DR. F. VON HEYDEN'S NACHFOLGER, DRESDEN.

For Samples and Prices apply to

BURGOYNE, BURBIDGES & CO.

12 and 16 COLEMAN STREET, LONDON, E.C.

ESCHMANN BROS. & WALSH,

Inventors and Manufacturers of the

SOFT SILK FLEXIBLE CATHETER,

GUARANTEED WITH WOVEN EYES.

To be had of all Surgical Instrument Makers and Wholesale Houses.

ARTIFICIAL HUMAN EYES FROM GLASS.

Excellent Quality. £6 per 100.

Plain Clinical Thermometers, in wood cases, 10/ per doz. Clinical Thermometers, with imperishable index, on massive tubes, about 4½ inches, in boxwood cases, 16/ per doz.; in nickel, 18/ per doz. Clinical Thermometers, several kinds. Glass Syringes in all kinds and sizes, at wholesale prices. Homœopathic Medicine Glasses of all kinds.

REFERENCES REQUIRED.

OSCAR BOCK, Kiel (Germany), Manufacturer of all kinds of Instruments from Glass.

HAMBRO SPECKLED

TRADE MARK REGISTERED.

LEECHES!

Warranted Healthy. Wholesale and for Exportation. Direct from Marshes.

FITCH & NOTTINGHAM,
LEECH BREEDERS,
4 CANONBURY SQUARE, LONDON, N.

All Orders by Post receive immediate attention.

To the Drug Trade! An important addition to Pharmacy from India, called "SAPONARIA."

The most wonderful Pharmaceutical novelty for Chemists to bottle as a speciality, or to mix with other preparations!

SAPONARIA is made in 2 qualities. No. I. for internal, and No. II. for external use

SAPONARIA No. I. Is *used* in Tooth Washes and Tinctures, and renders them saponaceous, cleansing, and antiseptic.
Is *used* for producing a creamy head on Syrups, Essences, and Tinctures in connection with Aërated Waters and Fermented Beverages.
Is *used* for emulsionising fats and oils.

SAPONARIA No. II. Is *used* in eczema and similar skin-diseases.
Is *used* for washing the head, rendering the hair silky, and cleanses the head to perfection.
Is *used* as an Insecticide and as a Nit Lotion.
Is *used* in veterinary practice—cures mange in dogs and horses.
Is *used* for washing dogs—kills all the fleas, and maintains the skin in good order.
Is *used* for washing silk, and does not injure its pristine beauty.
Is *used* for cleaning carpets, better than any soap or benzoline.
Is *used* for cleaning furniture, and is better than polish.
Is *used* for cleaning leather, especially harness and gloves, and is better than benzine.
Is *used* for cleaning wool and flannel, and is the only thing that cleans blankets without injury.
Is *used* for washing sheep.
Is *used* for emulsionising tar to produce a disinfectant.

Cash Prices—SAPONARIA No. I., per 1-lb. bottle, 2/6; SAPONARIA No. II., per ½-lb. bottle, 2/-. Free by post to any part of the British Isles.

BERTIE-SMITH & CO., Drug Merchants, Whepstead, Suffolk
AND AT BOMBAY.

For terms and particulars, apply to the Proprietors—

GUY'S TONIC COMPANY,
4 Ludgate Circus,
LONDON, E.C.

It may also be obtained from the usual Wholesale Houses.

Guy's Tonic

Guy's Tonic is sold Retail, at 2s. 9*d* per bottle.

One size only prepared.

We are co-operating with Chemists and the trade generally, arranging satisfactory terms in return for general enterprise on our behalf.

H. THIEMANN, JUN., CHEMICAL WORKS, STOLP, POMERANIA.

ACID BUTYRIC.
" CINNAMYLIC.
" LACTIC.
" OENANTHIC.
" SUCCINIC.
" VALERIANIC.

ETHER BUTYRIC.
" CINNAMYLIC.
" OENANTHIC, &c.
AMYLEN.
AMYLENHYDRATE.
VALERALDEHYDE.

OIL BITTER ALMONDS.
" AMBER.
" FUSIL.
ALCOHOL.—AMYLE, ISOLENTYLE, PROPYLE.
AMBER.—CRUDE, REFINED (for Varnish).

London Agents—**C. FAUST & CO.,** 2 The Crescent, Tower Hill, E.C.

CHEMISTS!!

WHO PUBLISH PRICE LISTS OR ALMANACKS

Are invited to send full particulars and sample copy to the Proprietor of one of the Best Remedies for Children extant.

Address, in first instance, Box 500, Smith's Mutual Advertising Agency, 139 Fleet St., E.C.

GLEDHILL'S PATENT

AUTOMATIC CASH TILL.

The Largest, Cheapest, and Best Variety of Cash Tills in the World. Hundreds in use.

Acknowledged by those who have bought them to be the most perfect Tills ever invented.

SOLID MAHOGANY, IN FOUR SIZES.

No. 1 ..	£8 8 0	1 and 2, to admit paper 3¾ wide; 3 and 4, to admit paper 2 in. wide. The paper is supplied 65 yards long, in one continuous length, and ruled to any pattern.
„ 2 ..	4 15 0	
„ 3 ..	4 4 0	
„ 4 ..	2 17 0	

1,500 customers can be served on the narrow paper for **One Penny.**

Nos. 1, 2, 3 are fitted with a Special Check Action. This is a very ingenious invention for preventing the drawer being carelessly or wilfully left partly open.

This is a feature, besides many others, which no other till possesses—and thus it has been pronounced the Till of Tills.

TESTIMONIAL.

After thoroughly testing several Check Tills, we unhesitatingly say that the one you supplied us with, and which we have had in use for several months, is the best for Chemists' use.

The wide width of your paper is a great advantage, and forms a permanent record of business, as well as a perfect check.

Contrary to our fears, the use of the Till does not delay the quick serving of customers.

WILSON & SON,
Pharmaceutical Chemists,
Harrogate.

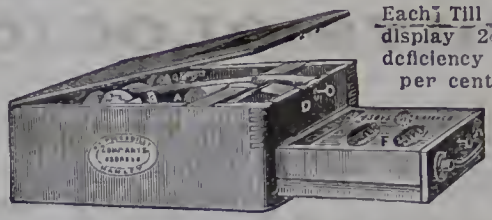
Send for particulars to the INVENTOR,

G. H. GLEDHILL, 41 & 43 Northgate, HALIFAX.

STOKES'

PATENT CHECK TILL SYSTEM.

A SOUND INVESTMENT.



Each Till has only to display 2d. per week deficiency to return 15 per cent. on outlay.

30,000 Sales Checked for **3 SHILLINGS.**

Terms and full particulars on application.

G. R. STOKES & CO., Limited, Hanley, STAFF.

DISPENSING BOTTLES & PHIALS

The following are our present Greatly Reduced Prices for not less than 3 gross of assorted sizes:—

	Per Gross.		Per Gross
6 & 8 oz., Plain or Graduated	8/6	½ oz. Phials	3/6
3 & 4 oz. „ „	7/6	1-oz. „	3/9
12-oz. „ „	12/-	1½-oz. „	4/6
		2-oz. „	5/3

Packages, 1/ each, allowed for if returned.

I. ISAACS & CO.

GLASS BOTTLE MANUFACTURERS.

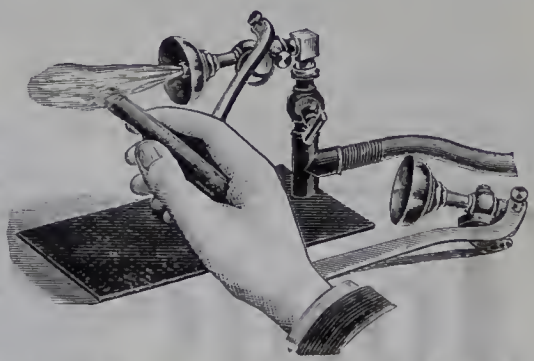
25 Francis St, Tottenham Court Road
153 Upper Thames Street **LONDON.**

BANKERS: LONDON AND WESTMINSTER BANK.

HAWE'S PATENT

SELF-ACTING SEALING JET

Adapted by The Apothecaries Hall, and leading Chemists, Stationers, and Tobacconists.
Great saving in Gas and Labour.



QUITE NEW.

SINCLAIR, TWEEDIE & CO., 13 ELDON STREET, LONDON, E.C.

GARDNER'S

PATENT COMBINED

'RAPID' SIFTER & MIXER,

Reduces lumpy powders, sifts and mixes faster, and makes a more perfect blend than any Machine in the Market.

Send for full particulars to

WM. GARDNER,
ENGINEER, &c.,
GLOUCESTER.

FOR HAND OR POWER. Capacities, from 15 to 300 lbs. at one mixing.

No BATH ROOM or CARRIAGE is fully Equipped without **RANKIN'S CORK MATS.**

Recommended by Medical Men.

RANKIN'S CORK MATS

Recommended by Medical Men.

Warm, Soft, and Dry, Easily Washed, Clean, and Durable.

BATHERS! Step from the Bath on to Rankin's Cork Mats. They Prevent Chills in Bathing, and keep the feet warm and comfortable.

Mr. GLADSTONE pronounces them to be *very useful*, and Lord SALISBURY and many of the Nobility and Gentry now use and appreciate them. They prevent cold feet in Driving, in Church, in the Counting-house, in Stone-floored Apartments. Used by Housemaids for kneeling on. *Numerous testimonials to their usefulness in a great variety of ways.* Sizes: 1 ft. square to 30 × 45 in. Prices: 3/, 5/, 7/6, and 10/6 each. Special Mats up to 21/ each.

CAUTION.—Each Genuine Mat branded "Rankin's Cork Mat."

Wholesale terms on application to

WM. RANKIN & SONS, Cork Importers, GLASGOW & LISBON.

WM. RANKIN & SONS, Cork Importers, GLASGOW & LISBON.

OF ALL leading Chemists & Furnishing Houses

A REAL COMFORT.

Wholesale Chemists' Agents: S. MAW, SON & THOMPSON.

F. SCHUTZE & CO.

Beg to call attention to their Special Lines in

BATH and FRICTION GLOVES, BATHING CAPS, SPONGE BAGS.

ILLUSTRATED PRICE LIST SENT POST FREE.

36a ALDERSGATE STREET, LONDON, E.C.

LINT.

GAMGEE TISSUE.

(PATENT ABSORBENT GAUZE AND COTTON WOOL.)

ABSORBENT COTTON WOOL.

ROLL BANDAGES.

ANTISEPTIC DRESSINGS.

ROBINSON & SONS,

COTTON SPINNERS AND MANUFACTURERS OF

SURGEONS' LINTS, COTTON WOOLS,

BANDAGES, & ANTISEPTIC DRESSINGS,

WHEAT BRIDGE MILLS,

NEAR CHESTERFIELD.

Depot—55 Fann Street, Aldersgate Street, London.

TRADE MARK.

Telegrams—
"LINT LIVERPOOL."

LINT.

THE

LIVERPOOL PATENT LINT CO.,

MARK ST. MILLS,

NETHERFIELD ROAD NORTH,

LIVERPOOL.

MANUFACTURERS OF

FLAX, & COTTON, LINTS,

ABSORBENT, AND CARDED

COTTON WOOLS,

ABSORBENT, OPEN WHITE, and GREY

BANDAGES,

SURGEON'S, AND CARBOLIZED

TOW.

FRANK WOOD

(From W. WOOD & SON, MANCHESTER),

42 BELVOIR STREET, LEICESTER.

Single Trusses	15/- per doz.	Elastic Gum Catheters (Best) ...	9/- per doz.
Double ,, ...	30/- ,,	Catheters à Boule	15/- ,,
Watch-spring Pessaries	17/- ,,	Indiarubber Catheters	15/- ,,
Vulcanite Ring ,, ...	11/- ,,	Cotton Suspenders	10/- ,,
Hodge's Vulcanite ,, ...	9/- ,,	Cotton Elastic Stockings	2/9 each.
,, Indiarubber Pessaries ...	11/- ,,	Silk ,, ,, ...	3/9 ,,
Zwanke's Vulcanite ,, ...	2/9 each.	Clinical Thermometers	2/4 ,,
Elastic Gum Catheters	7/- per doz.		

THESE PRICES ARE FOR CASH WITH ORDER, POSTAGE EXTRA.

GENUINE DALMATIAN INSECT POWDER.

G. Vogt & Co.'s Insect Powder has a world-wide reputation!

PRICE, LOOSE, 1s. 5d. PER LB. NET CASH.
SPECIAL LOW PRICE IN ORIGINAL KEGS OF 1 CWT. NET.

G. VOGT & CO., Wholesale and Export Druggists, 19 LAURENCE POUNTNEY LANE, LONDON, E.C.
TELEGRAMS—"ALSACE LONDON." SAMPLES AND PRICE LISTS FREE.

WALKER, TROKE & CO.

WHOLESALE AND EXPORT DRUGGISTS,
82 CITY ROAD, LONDON, E.C.

SOLE MAKERS OF

GABRIEL & TROKE'S
GELATINE
CAPSULED
HORSEBALLS.

ELEGANT IN APPEARANCE.
EASY IN ADMINISTRATION.
EFFICIENT IN ACTION.

Alterative, Condition, Cordial, Cough, Diuretic, Fever, Physic, and Worm Balls.

QUOTATIONS & SAMPLES FREE ON APPLICATION.

WILEY'S CHEMICAL ESSENCE

FOR

LAMENESS IN HORSES.

Agents Wanted in every Town. Handbills, with Name and Address, supplied gratis

50 YEARS' UNBROKEN SUCCESS.

SOLE MAKER & PROPRIETOR, J. ROOKLEDGE, CHEMIST, EASINGWOLD, YORKS

TO BE HAD OF USUAL WHOLESALE HOUSES.

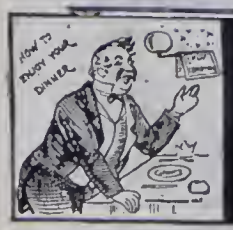
JAMES BURROUGH, S.V.R. 65 o.p. 60 o.p.

CALE ST., CHELSEA, S.W.

and Methylated Spirit

AT LOWEST PRICES.

WRITE FOR QUOTATIONS



PROTECTED BY LETTERS PATENT.

"Catch more Flies in a day, than the old fashioned papers do in a week."

THE "FLY CEMETERY"

Free from Poison. Annual sale millions. Liberal Terms.
Manufacturers, TUNBRIDGE & WRIGHT, Reading.

S.V.R., B.P.

We wish to draw the attention of Chemists to the excellence of the spirit we supply for pharmaceutical purposes. We have devoted great care and attention to this branch and have made it a leading line.

That our efforts in this direction have been appreciated is proved by the number of *unsolicited* testimonials we have received from nearly every town in the country, of which the following is a specimen:—

GENTLEMEN,— The Pharmacy, Morecambe.

Please send 5 gall. 56 o.p. as before. I have pleasure in saying I have always found your spirit answer all tests, which is more than I can say of all I have had from different places, and also to be practically free from odour.

Messrs. Stephen Smith & Co. Yours faithfully, JOSH. N. CUTTS, B.Sc., F.C.S.

In consequence of the increase in the spirit duty our prices will be—

S.V.R. 56 o.p.... ... ... 19s. 3d. | **Double Distilled. 56 o.p. ... ... 19s. 7d.**

CASH WITH ORDER. REDUCTIONS FOR QUANTITIES.

SPECIALITY FOR PERFUMERY.

This pure grain spirit, which has been thrice rectified and filtered through charcoal, is being largely used in making high-class Perfumes.

Price, 19/10, 56 o.p.; 20/4, 60 o.p. Cash with Order. Reductions for Quantities.

STEPHEN SMITH & CO., BOW, LONDON, E.

S 0/56 19/2 V 0/60 19/8 R

SPECIAL TERMS TO LARGE BUYERS.

CASH WITH ORDER.

49 CLERKENWELL ROAD, LONDON, E.C.

THE CHEAPEST HOUSE FOR METHYLATED SPIRIT

TREBLY DISTILLED BY OURSELVES.

PERFECTLY PURE.

FIT FOR ANY PURPOSE.

ST. ANDREW'S DISTILLERY,

S 0/64 V 2/3 M

Jars, 2-gallon, 2/6; 3-gallon, 3/; 4-gallon, 4/.
Drums, 5-gallon, 3/6; 6-gallon, 4/; 10-gallon, 6/.

S. V. METH.

JONES & COMPANY,

COPPERFIELD ROAD

LONDON, E.

LARGEST MAKERS IN THE KINGDOM.

We are prepared to supply METHYLATED SPIRIT in 5-gallon quantities at Lowest Prices.

REDUCTIONS TO LARGE BUYERS.

SAMPLES FREE.

BEESWAX.

W. H. B. PURE REFINED.

In 2-lb. cakes, in cases of about 130 lbs.
" 1 " " " 130 "
" ½ " " " 110 "
" ¼ " " " 110 "
" oz. cakes in 2-lb. parcels in cases of 54 lbs.

W. H. B. PURE WHITE.

In round cakes in 2-lb. parcels, or in oblong cakes, loose } in cases of 54 lbs and 56 lbs.
In oz. cakes in 2-lb. parcels
Plain blocks of 7½ lbs. in cases of 250 lbs.

WHITE WAX.

Plain round cakes in 2-lb. parcels in cases of 72 lbs.

The purity of these goods is certified by the following eminent chemists: S. P. Sharpless, State Assayer, Boston; J. W. Taylor, Associate of the Society of Public Analysts of Eng., Montreal, P. Q.; Edward Davies, F.C.S. and T. I. C. and C., Royal Institution, LIVERPOOL, Eng.; Bernard Dyer, D.Sc., F.C.S., F.I.C., Member of the Society of Public Analysts, 17 Great Tower Street, LONDON, E.C., Eng.; Wm. T. Wenzel, Analyst and Assayer, San Francisco, Cal., and may be obtained of any of the leading Wholesale Druggists in the Northern and Midland Counties.

We will deliver our goods in 5-cwt. lots ex quay, in any city which is the Terminus of a Steamship Line throughout the Kingdom, without trouble or expense to the Buyer.

Our Goods may be obtained in single Case lots from any of the Leading Wholesale Druggists in the Northern and Midland Counties, and of

W. H. BOWDLEAR & CO., BOSTON, MASS., U.S.A.

Cable Address:] Office and Warehouse—36 CENTRAL WHARF. ["*Bowdlear Boston.*"

R. H. BARRETT,

Flint Glass Bottle Works,

THE OVAL, CAMBRIDGE HEATH, LONDON, E.

For Beauty, Cheapness, and Efficiency R. H. BARRETT'S

WATCH SMELLING-SALT BOTTLES

EXCEL ALL OTHERS IN THE MARKET.

The Caps are all fitted with INDESTRUCTIBLE WASHERS, to resist the action of Ammonia and retain the strength of the Salts.

Price, assorted white and coloured, 10/6 per gross (in 5-gross lots).

Chemists' and Perfumers' Bottles in great variety, Plain or Stoppered

Telegraphic Address—"FOREFRONT LONDON." [1]

MOVE WITH THE TIMES!

PATENT FOLDING BOXES

For Packing Pills, Powders, Patent Medicines, Foods and Drugs of all kinds, Postal Bottle Boxes. Samples and Quotations forwarded.

ADVANTAGES.

Economy.—These Boxes are much Cheaper than ordinary Boxes, and just as strong. Made any size.
Save Space.—Fifty folded Boxes fit in the same space as five standing. Take up no room.
Save Labels.—The Boxes are supplied printed plain or in colours, or with lithographed designs. No labelling.
Advertise.—Very effective advertisers. (See Illustrations.)

SPECIALITY—PARCEL POST BOTTLE BOXES, CORRUGATED LININGS.

I. W. PARMENTER & CO., LIM.

MANUFACTURERS, PRINTERS & LITHOGRAPHERS,

7 & 8 Kirby Street, Hatton Garden, E.C.

Telephone No. 6561. Telegraph "Enumerate."

CHALMERS' PATENT SAMPLE AND PARCELS POST BOX.

THE ONLY BOX

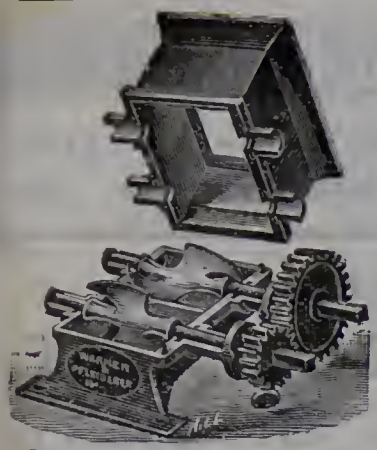
That fulfils ALL the requirements of the POST OFFICE.

Is fastened INSTANTLY.
Cannot open by accident.
Is immensely strong.
Has no corners.
No seams, joints, nor solder.
Nothing to scratch or tear letters.
Is practically air-tight:—Is used for Flour, Cherry Blossom, Sanitas, and Soap-Powders.
Dispenses with string, bags, and paper.
Saves 19 minutes out of 20.

OVER 300,000 SOLD.

SAVING THEIR OWN COST.

W. B. CHALMERS, 37 MINCING LANE, E.C.



Size 3, Type I, for 1-lb. Mass.

THE "UNIVERSAL"

KNEADING AND MIXING MACHINE

FOR

PILL MASS MAKING,

ALSO FOR

Horse Balls, Tooth Pastes, Ointments, Soaps, Powders, and for general Mixing and Incorporating.

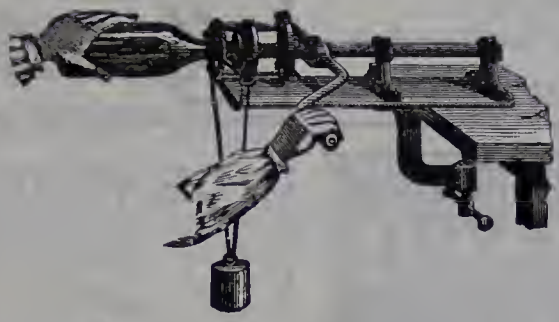
REPLACES WITH ADVANTAGE ALL OTHER APPLIANCES FOR THESE PURPOSES.

Made in various sizes, to do from ½ lb. up to 1 ton at a time.

WERNER & PFLEIDERER, 86 Upper Ground St., Blackfriars Bridge, **LONDON, S.E.**

NEW CAPSULING MACHINE

The only Machine which leaves no crease or pleat on the Capsule.



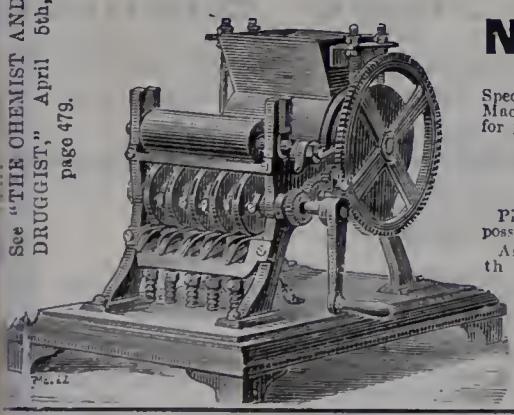
Can be fixed to any Counter. A single pull of the lever is sufficient to fix the Capsule.

Patentee—C. MELIN, 37 Crutched Friars, LONDON, E.C.

MAKERS OF ALL KINDS OF

MACHINERY for the MANUFACTURE of PHARMACEUTICAL PREPARATIONS

See "THE CHEMIST AND DRUGGIST," April 5th, page 479.



N. PALAU & CO., 43 Avenue du Maine, PARIS.

Special Mills or Laboratories, Mortar-mills, Sifting-machines, and Grinding-machines. Pill-making Machines, Silvering-machines, Coating-machines, Pill-printing Machines. Sugar-coating Pans. Machines for preparing and for cutting Pill-masses. Machines for manufacturing Lozenges. Machines for making Pearls and Gelatinous Capsules. Laboratory Presses, Mixing-machines, &c.

PILL COATING & PRINTING.

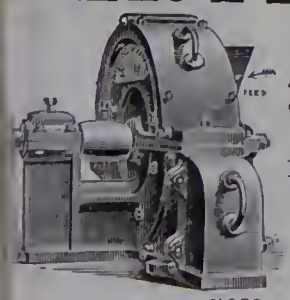
Pill-printing has long been considered a luxury, and remained in the hands of a Paris house, which alone possessed a proper coating process.

As a matter of fact, the coating was the unique difficulty to the extension of the process. This no longer th se, and we are in a position to offer our clients communication of a means of coating pills. This coating serves as a protection to the substances composing the pills; also, it is absolutely soluble in the gastric juices, and a clear impression is obtained by printing.

The coating effectually protects the pills from alteration from whatever cause, in any climate or temperature. It is less costly than silver or sugar coating.

Thus, by our means, pill and granule printing has become quite practicable. It gives a superior appearance to the goods, besides wh ch the printed inscription has the advantage of advertising the manufacturer's name, or of indicating the nature of the active principle.

CARTER'S DISINTEGRATORS



No 00

Will Pulverise, Granulate, or Shred almost any Mineral, Vegetable, or Animal Substance.

NEARLY 1,600 IN USE

In all parts of the World.

For Grinding Sugar, Bark, Linseed, Ginger, Pepper, Spices, Salt, &c., this Machine is invaluable Made in 9 Sizes. Illustrated Catalogue may be obtained on application.

Samples of ANY Material will be Ground free of charge.

TELEGRAPHIC ADDRESS ... ... "MILLING LONDON."

. HARRISON CARTER, 82 Mark Lane, LONDON, and 3 Rue du Louvre, PARIS.

HORN & SON
OFFICES FOR BRITISH AND FOREIGN
PATENTS AND TRADE MARKS,
SOMERSET CHAMBERS, 151 STRAND, LONDON
(NEXT TO SOMERSET HOUSE).
Guide to New Patent Law and Registration gratis.

ESTABLISHED 1855.
SANFORD & SON
MANUFACTURERS, SANDY, BEDS
Sole Proprietors of Sanford's Celebrated RAT POISON, without doubt the best ever introduced. Price, 6d., 1s., 2s., and 3s. per box.
Also MICE POISON; cannot be excelled. In packets, 3d., 6d., and 1s. each. Liberal terms to Chemists.
Wholesale of BARCLAY & SON, SANGER & SON, NEWBERY & SON, EDWARDS & SON, and others, London.

FREDK. FINK & CO.,
10 & 11 MINCING LANE, LONDON, E.C.
SPECIALITIES: Glycerine—Gum Arabic—Gum Tragacanth—Pure Beeswax—Honey—Vanilloes.

THE OLDEST ENGLISH & AMERICAN CHEMIST in PARIS (founded 1808)
BOISSY *late* **GALLOIS**
2, Place Vendôme, Corner of rue St-Honoré would undertake one or two additional agencies for patent Medicines, Sundries, etc. Special connexion amongst Doctors in Paris & Provinces.

ALCOHOL VARNISHES.
FIRM—**A. DIDA.** (Estab. 1847.)
G. LEVASSEUR & CO., CHEMICAL ENGINEERS
(Successors of L. DIDA),
108 BOULEVARD RICHARD LENOIR, PARIS.
WORKS AT DRAVEIL (S. and O.).
SILVER MEDAL, PARIS EXHIBITION, 1889.

ALL CHEMISTS
Who stock and introduce to the notice of their customers the new remedy for Skin Diseases, known as
ANTECZEMA,
Will always find that it commands a ready Sale. It never fails to cure, and recommends itself. The preparation is a bland, soothing cream made by an entirely new and complicated process, and is perfectly harmless and non-poisonous.
In Bottles at 2s. 9d., Wholesale of F. NEWBERY & SONS, or of the Sole Agent—R. C. LAYNG, Chemist, 93 Finsbury Pavement, E.C.

JUST WHAT'S WANTED!
SHRINKING entirely PREVENTED.
Lucas "EVICTOR" Soap
Is a SPECIALITY exclusively for Washing WOOLLEN Goods THAT ARE LIABLE TO SHRINK.
Neatly wrapped, full instructions, ½ Gross Boxes, 18/- Gross Tablets.
Of all Wholesale Houses, and C. W. LUCAS & CO., 51 Milton St., London, E.C.

Is invaluable to all Chemists for Printing Price Lists, Circulars, &c.
Price from 25s. to 42s. complete.
Apply for Descriptive List and Specimens of Work to the
CYCLOSTYLE CO., 79a Gracechurch St., London, E.C.

PRECIPITATED CHALK, WHITEST AND PUREST.
CHEAPEST SELLERS IN THE MARKET.
ALSO CHEMICALS, DRUGS AND OILS.
APPLY TO
AUG. LEVERMORE & CO.,
8 LIME STREET LONDON, E.C.

GREENSILL'S
ORIGINAL
MONA BOUQUET.
Wholesale and Shipping Terms sent on application to the Sole Manufacturers—
GREENSILL & SON, DOUGLAS.
ESTABLISHED 1852.

Fletchers' *Hydrobromates*
Supplied in Original Bottles ready for Patient's use (stamped), to retail at 4/6 each; also in 1-lb. Bottles for Dispensing, by the Sole Manufacturers:—
Fletcher, Fletcher & Stevenson, 21 Mincing Lane, London, E.C.

ROBINSON'S THE BEST IN THE WORLD.
Wholesale of
SANGER & SON, Oxford Street,
and
MAY & ROBERTS, Clerkenwell Road,
LONDON.
FAMILY PILLS.
TRY THEM!!

STOWER'S
LIME JUICE CORDIAL
(no musty flavour)
As supplied to Her Majesty and both Houses of Parliament.
700 *Medical Testimonials.* *Good Steady Demand.*
Sole Proprietors—A. RIDDLE & CO., 38 Commercial Street, London, E.

S. SAINSBURY'S
From English Lavender Flowers, and most choice and delicate scents.
Lavender Water.
176 & 177 STRAND, LONDON.
Established 1839.
Wholesale and Shipping terms on application.

MOUILLA LIQUID SOAP
The invention of Dr. DUNCAN, St. Petersburgh.
Beautifully Transparent Golden Colour. Delicately Perfumed.
As prescribed by most eminent Skin Physicians.—See Testimonials.
In handsome bottles with sprinkler tops. Retail, 6d. and 1/6 per bottle. Wholesale terms on application to
The Mouilla Liquid Soap Co., Ld., 6 Adam St., Strand, W.C.

EMP. ADHÆSIVUM OPT.
16 INCHES WIDE.
On Glazed Calico, 2/9; on Shirting, 4/3 per doz. net cash.
JOHN QUILLIAM & CO., Plaster Works, Cowburn Street, Manchester.
[3]

HYDE, NASH & CO.

16 Philpot Lane, LONDON, E.C.

SPECIALITIES—
Arabic and Varnish Gums, Glucose, Glycerine, Beeswax, Honey, Rhubarb, Insect Powder, Saffron, &c., &c.
Country orders for original packages included n public sale purchases at fractional margins.

PURE WHITE BEESWAX

Guaranteed pure, of the best quality, in blocks, cakes, or other forms.
Candles, and all other articles manufactured of Beeswax, at the lowest possible prices.
QUOTATIONS FREE ON BOARD HAMBURG AND OTHER PORT

Lüneburger Wachsbleiche Wax Bleaching Works,
LUNEBURG (GERMANY).

ORANGE WINE

(VIN. AURANT., P.B.)

Specially brewed for Quinine Wine. Does not deposit, will keep good in any climate. In casks, 13 gallons to 140 gallons; small casks 3s. 9d. per gallon. carriage allowed if paid within three months. In wine-bottles (not less than 3 doz.) at 9s. per doz., bottles included Casks and cases extra, and returnable.
Sample four stamps. *Special quotations to large buyers.*

DURRANT & CO., Railway St., HERTFORD.

KURWA TEL (Registered),

AN INDIAN MEDICINAL OIL, will be found a most effectual remedy for RHEUMATISM, GOUT, CHILBLAINS, LUMBAGO, and all CHEST COMPLAINTS. Sold in bottles by the Importers and their appointed Agents, at 1/-, post free 1/1½.

Acknowledgments of benefits derived from its use have reached us from Ministers, Medical Officers, and grateful mothers, from all parts of the country. Tea samples on application.

THE INDIAN TEA PLANTERS' COMBINATION, Fenchurch House, 7 Fenchurch Street, LONDON, E.C.
Agents wanted where not already represented.

CHAMOIS For Mirrors, Silverware, Domestic, Underwear, and Toilet Use.
WHITE SPLITS Pure White, Splendid Quality, for Capping Perfumery, &c.
WHITE PLASTER SKINS For Chemists and Druggists.
Basils, White Norway Doeskins, White Mock Does, Buckskins.

T. P. LEE & CO., 24 DUKE ST., BLOOMSBURY, LONDON, W.C.

IVORINE.

This absorbent Cream protects the Skin from unpleasant effects of Sun Heat, Cold Winds, Hard Water, &c. Complexions eruptive or impaired by using powder or irritant cosmetics become purified and healthful.
Miss Ellen Terry writes:—"I find Ivorine the very best thing I have ever had to correct a dry skin" *Miss Kate Santley* writes:—"I have pleasure in saying Ivorine is admirable for the skin, and can confidently recommend it." *Miss Forteseue* writes:—"Ivorine is most pleasant, and preserves the skin, particularly when exposed to cold east winds." *Miss Neilson* writes:—"Ivorine is excellent for keeping the skin smooth, and shall certainly continue to use it."
Sold at 1s. 6d. a Box, to Trade 12s. per dozen.
Manufacturers—MORSE & CO., 3 Wood Street, BATH.

BLAIR'S
GOUT & RHEUMATIC PILLS

CURE GOUT. CURE RHEUMATISM. CURE SCIATICA.
CURE LUMBAGO. CURE NEURALGIA.

The **Excruciating Pain** is quickly relieved, and cured in a few days, by these celebrated Pills, well known as the **Great Remedy** for the above Complaints.
No restraint of diet during use.
Sold by all Chemists at 1s. 1½d. and 2s. 9d. per box.

One of the most valuable recent Inventions for the Preservation and Improvement of Health.
Sells very readily. No Chemist should be without one in stock. Retail Price 10s.
SOLE LICENSEES—
ELLIS & CO., LIM., 47 FARRINGDON ROAD, LONDON, E.C.

CHEMISTS

WHO ADOPT

HOUSE-TO-HOUSE DISTRIBUTION

As a mode of Advertising are requested to communicate with
F. RIDDIOUGH, Changegate House, KEIGHLEY.

JACKSON'S
ELECTRIC CORN & WART TUBES

These tubes, being hermetically sealed, prevent any loss by evaporation or drying up of contents. Each tube is enclosed in a cardboard case, and each doz. cases mounted in a handsome box for displaying on the counter.
Price 3s. 6d. dozen. Usual discounts.

Manufactured by **HAROLD JACKSON, STRANGEWAYS, MANCHESTER.**

TO LET.

BARTON'S EXTERMINATOR.

ONE SHILLING PER BOX.

Kills and Completely Dries up Rats or Mice. Does Not Harm Dogs or Cats. No Smell from the Dead Ones.

WOLSTENCROFT & CO., 28 LUDGATE HILL, E.C.
THROUGH ALL THE WHOLESALE HOUSES.

IN REPLY

All purchasers of HOMŒOPATHIC Medicines and Preparations, before ordering elsewhere, should write to

WATSON & WATES

93 Leadenhall St., LONDON, E.C.,
For Price-List.

Special Line—The "ACME" AGENT'S CASE. Is made in Mahogany, Walnut, Ebony, or Oak, to correspond with Shop Fittings, and is the most unique and attractive Show Case extant. £3 3s. net. Retail value of contents, £9. No charge for Case.

PHOTOTYPE ON RECEIPT OF POST CARD.

THE ONLY PERFECT ENEMA OBTAINABLE.

INGRAM'S IMPROVED HIGGINSON

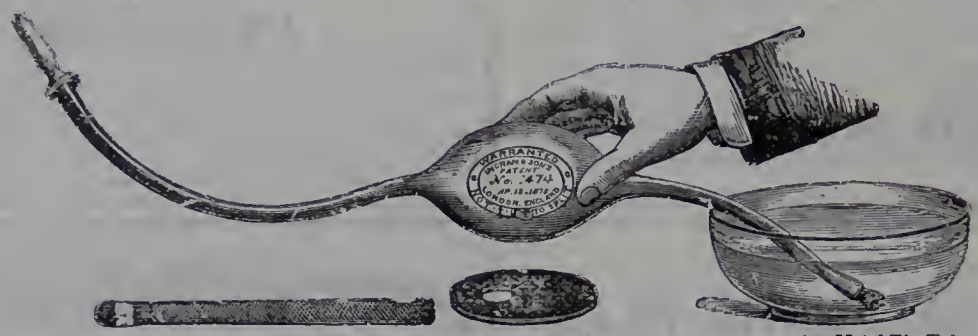
ENEMA AND SYRINGE APPARATUS

(BY ROYAL LETTERS PATENT).

Made without Seams or Ribs by our Patent Process of dipping in a solution of India Rubber, thus adding great strength and durability.

NONE GENUINE UNLESS STAMPED WITH NO. OF PATENT 1474.

CAUTION.—The only Enema made without Ribs.



All Imitations may be detected by the Ribs on the Surface, and are always liable to split.

WARRANTED NOT TO SPLIT

A.—Metal Pin Valve.

INGRAM'S IMPROVED PATENT SEAMLESS ENEMA is perfectly smooth on the surface, will not become hard or sticky, will not leak, and will not admit air while injecting or refilling. Specially prepared to resist the heat of tropical countries.

The great superiority of **INGRAM'S IMPROVED PATENT SEAMLESS ENEMA** over all others has given rise to VARIOUS IMITATIONS, and it has become imperative that the Patentees should, in order TO PREVENT DECEPTION, explain the PROCESS OF MANUFACTURE OF THEIR ENEMA and the MODE OF MANUFACTURE OF IMITATIONS thereof, as they have UNDENIABLE PROOF that INFERIOR ENEMAS are positively BEING SOLD as their "ADVERTISED" PATENT SEAMLESS ENEMA.

INGRAM'S IMPROVED PATENT SEAMLESS ENEMA is made by a NEW PATENT PROCESS, viz. : By repeated dipping in a solution of India Rubber until the required substance is attained. This process adds greatly to its STRENGTH and DURABILITY, and, at the same time, dispenses WITH ALL SEAMS, which, as is well known, are weak points in an Enema. This improved mode of manufacture (the result of long study and experience) enables the Patentees to produce a PERFECT ENEMA WITHOUT SEAMS, thus overcoming the great fault to be found in ALL other Enemas, viz. : SPLITTING AND LEAKING, which has always been a source of trouble.

INGRAM'S IMPROVED PATENT SEAMLESS ENEMA is fitted with IMPROVED VALVES, which prevent the admission of air with the fluid and CAN at any time BE REPAIRED, if necessary.

CAUTION.—Imitations of **INGRAM'S IMPROVED PATENT SEAMLESS ENEMA** are made of several pieces of Sheet India Rubber, which are cemented together and shaped in a mould, THUS PRODUCING RIBS ON THE SURFACE, and ENEMAS SO MANUFACTURED ARE ALWAYS LIABLE TO SPLIT AND LEAK AT THE SEAMS, AND THUS TO BECOME QUITE USELESS.

INGRAM'S IMPROVED PATENT SEAMLESS ENEMA may be distinguished from ALL IMITATIONS by its ENTIRE FREEDOM FROM RIBS OF ANY DESCRIPTION on its surface, and by having an IMPROVED METAL PIN VALVE at the suction end A ; and it is acknowledged to be the ONLY PERFECT ENEMA OBTAINABLE.

Patented in England, No. 1474, April 12, 1878; in France, No. 126,909, October 11, 1878; and in America, No. 212,939, March 4, 1879.

To be obtained of all Surgical Instrument Makers, Druggists' Sundriesmen, Chemists and Druggists, in the three following qualities:—

No. 1a. Highly Polished, in Red, Green, Blue, Black, or White.
No. 1b. Unpolished, in Red, Green, Blue, Black, or White.
No. 2. Unpolished, in Drab only.

Favourably noticed in "British Medical Journal," December 13, 1879; in the "Lancet," January 3, 1880; and in "British Medical Journal," September 30, 1882.

WILLIAM TOOGOOD'S

WAREHOUSE AND SHOW ROOM,

BURLINGTON BUILDINGS,

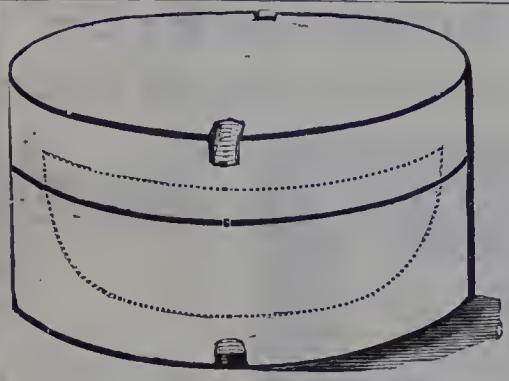
HEDDON STREET, REGENT STREET, LONDON, W.

TOOGOOD'S

IMPROVED PATENT

EARTHENWARE COVERED POTS

Are claimed to be the most perfect and convenient yet offered to the Trade.



Owing to the increasing demand for our Patent Pots, we have introduced a Special THIN Series for Dispensing.

These Pots are beautifully glazed and finished, and, being very light, are specially adapted for sending by post.

ORDINARY THICKNESS—

1 dr.	2 dr.	½	¾	1	1½	2	3	4	6	8 ounces.
1/6	1/6	1/6	1/8	1/10	2/	2/3	2/10	3/6	4/6	5/6 per doz.

THIN FOR DISPENSING—

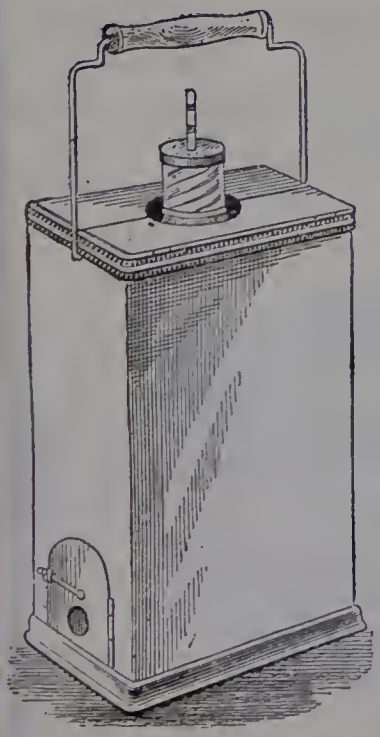
½	¾	1	1½	2	3	4	6	8 ounces.
1/7	1/9	2/	2/2	2/5	3/	4/	5/	6/ per doz.

THE LACTOTHERME

(REGISTERED TRADE MARK) OR

INFANTS' PORTABLE MILK STOVE,

Patented in England and Abroad.



ADVANTAGES.

The Lactotherme heats milk exactly to the proper temperature at which it should be given to Infants, viz., 98 degrees Fahrenheit, this being the temperature of the milk from the mother's breast.

The Lactotherme does not cause the milk to turn sour.

The Lactotherme greatly benefits the health of Infants, as by giving food at a proper temperature, Colic, Diarrhœa, and Convulsions are guarded against.

The Lactotherme is portable, and may be as effectively used in a Railway Carriage as in the Nursery.

The Lactotherme will be also found a boon to Invalids for keeping warm Beef Tea, &c., during the night.

The Lactotherme is safe, cleanly, and effective, and burns without smell.

WHOLESALE PRICES.

No. 1. Japanned Iron, 6/- each. No. 2. Polished Brass, 8/6 each.
No. 3. Nickel Plated, 10/- each.

Each Apparatus is furnished complete with Thermometer, Box of Prepared Carbon, Box of Wicks, and Float.

TOOGOOD'S PATENT BRONCHITIS AIR KETTLE,

51/- per dozen.

SOLE AGENT FOR DR. LEE'S STEAM DRAFT INHALERS.

HOMŒOPATHIC MEDICINES

AGENTS' SHOW CASES, BULK GOODS.

KEENE & ASHWELL, Homœopathic Chemists

74 NEW BOND STREET, LONDON

(Successors to HEADLAND & CO., the First Established Homœopathic Chemists in Great Britain).

AGENTS' SHOW CASE OF

HOMŒOPATHIC STOCK

50/-

WITHOUT EXCEPTION

THE CHEAPEST & BEST CASE IN THE TRADE.

CONTENTS REALISE AT RETAIL PRICES

£5 : 5 : 0

Besides the handsome bent glass Counter Show Case, for which there is no charge.

A NOVELTY IN AGENTS' CASES.

This Show Case has been designed to assist in furnishing a Chemist's Counter, either when commencing business, or when refitting the Pharmacy. It is a good-looking Case, made of Mahogany and bent Plate Glass, with a carved Back and bevelled Mirror. The velvet-lined Top is left empty for Fancy Articles, Patent Medicines, &c. That this Case has been found to meet this requirement, the following unsolicited testimonial, which we have received, testifies:—

Messrs. Keene & Ashwell. Hoole Pharmacy, Chester, June 6, 1890.

Gentlemen,—Case to hand this afternoon. It is a very handsome Case, and is just what I wanted to complete my counter. Packing Case returned to-day. Yours truly, D. DICKINSON.

Send for one of our Illustrated Lists. Free on application.

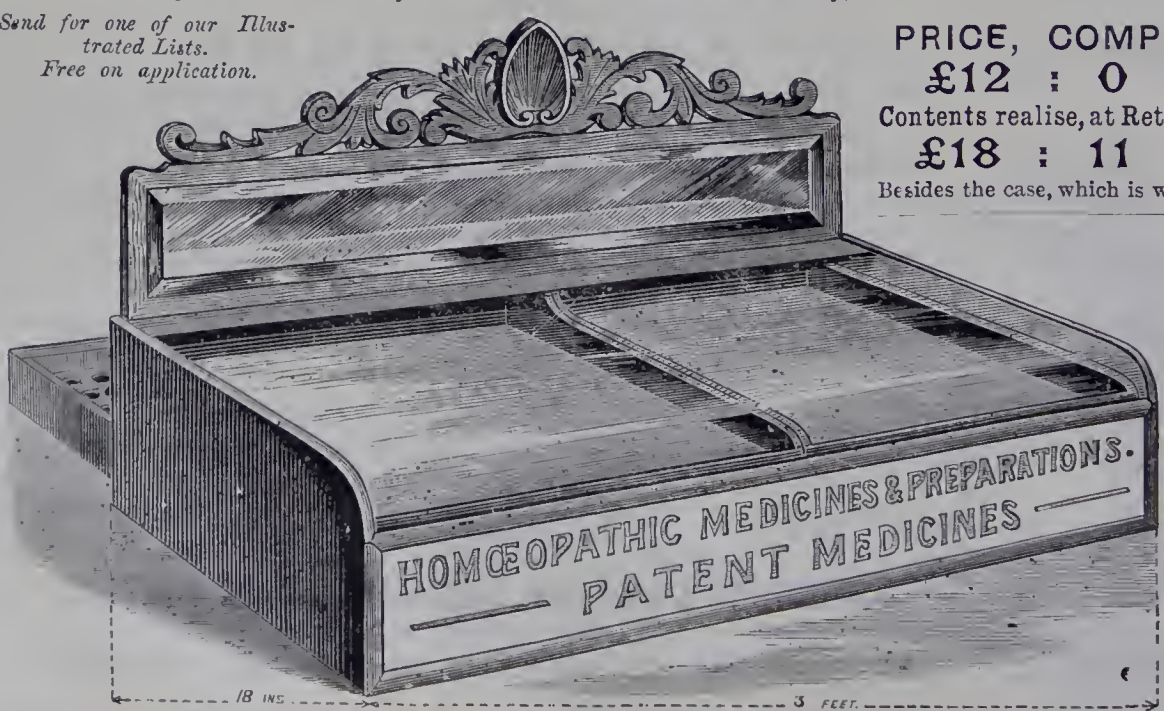
PRICE, COMPLETE,

£12 : 0 : 0

Contents realise, at Retail Prices.

£18 : 11 : 0

Besides the case, which is worth £8 8s.



PRICE LIST ON RECEIPT OF CARD.

(Dimensions, 3 feet long, 18 inches wide, 8 inches high, 18 inches to top of mirror.)